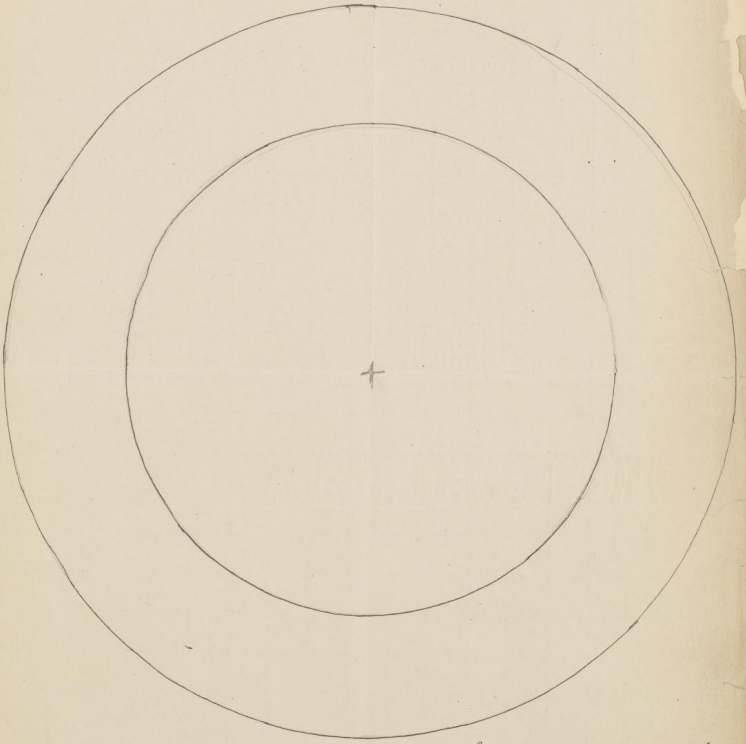
KG
1365
962

Book ~~XXXIX~~ H. S. L.

Miscellaneous

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KE 11365. 962

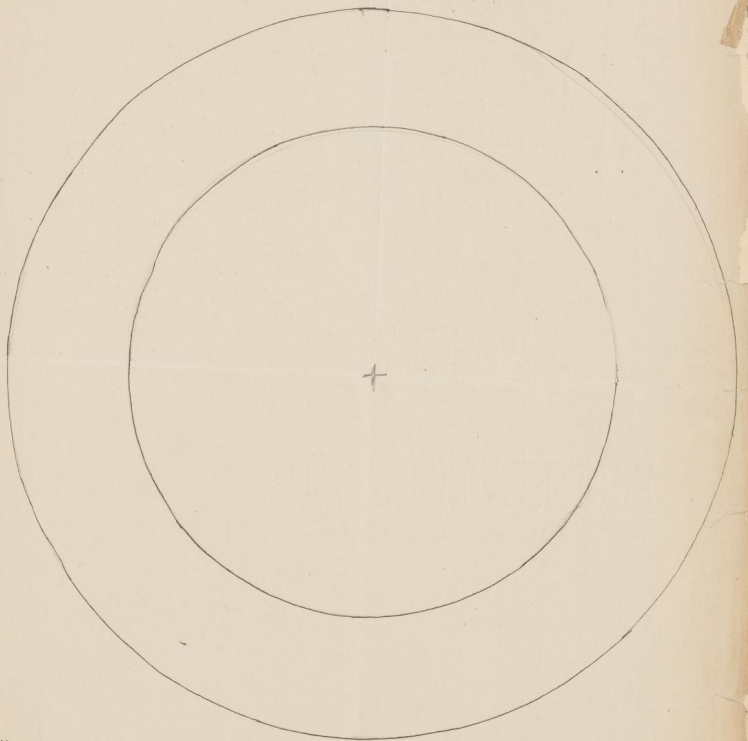


Smaller circle, radius 60 millimetres. 10° Images beyond this are poor on AC plates

Large circle, radius 90 mm, about 15°. Images extremely poor beyond this [illegible] C plates

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Smaller circle, radius 60 millimetres. 10°. Images beyond this are from on AC plates

90 circle, radius 90 mm, about 15°. Images distinctly from beg. this C plates

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Contents of Book XXXIX, H.S.L.

U Ursae Majoris Estimates of Brightness	4-33
Remeasurements, discordant plates	34, 35
Definitive. Region of Best AC and AM	36
I plates	37
R Lyncis. Examination of Discordant Plates	38
U Coronae. Estimates of additional Comp. Stars	39, 40
Pleiades. Yellow plate MC 7749	41
U Sagittae. Multiple Image plates	42-48
Remarks	48
U Pegasi. Comp. Stars c'.	49
U Sagittae. Observations on A I plates, etc	50-68, 77
R Z Cassiopeiae Obs. near minima	69-73, 76
T Ursae Majoris. Examination of discordant plates	74, 75
R Lyncis Estimates of Region Stars on Polar Seq.	78-80
R Draconis. Examination for discordant Obs.	81
R R Tauri Observations of Variable	82-84, 90-93, 97-102
Examination of AC Plates for Red Stars	85
Draconis. Measures to determine Elongation Image on discordant plates	86-89
Nov Var. D.L. Locke +17° 736. Preliminary estimates	94-95
S Bootis - Examination for discordant Observations	96
SW Cygni. Exam. I H. images for E.S. King	97, 103-106
(for magnitudes of H Comparison stars	
S Cassiopeiae Exam. for discordant Obs.	
T Ursae Majoris. " " " "	107, 108
R T Sagittae. Comparison Stars	109-111
S Cephei. Obs. Dudley	112

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R Y Sagittarii - preliminary estimates	113-115
R Cygni. Measures of Comparison Stars	116-121
Observations of Variable	122-168
Corrections for Distance H 1506 (Praesepe)	170-171
Diameters	170-173
Scale R	174-177
Scale AL	178-186
AC 18703, AC 18704 (Different Lenses) examined	169
Messier 15 M W Plates Circle of Deflection	187
Distances	188
Corrections for Distance Lick 2060, 2064 Distances	189-193
Corrections for Distance H 1881 Diameters	174-197
Corrections for Distance H 1506 Grating	198-199
Quality of M W Plate 103	200
Comparison of 10-inch Metcalf and 8-inch Draper	201, 202
S S Cygni Estimates of Bright Stars on Seven Plates	203
Estimates in terms of grating	204
Nova Persei No. 2 Recent Plates	205
Pon Region. Sept. Sol. Plate 18a	206, 207
" " " Cat. Stars looked up	208, 209
V Camelopardalis Estimates of Brightness of Comp. Stars	210
Estimates on Plates taken near maximum	211
Nova J.C.M. $20^h\ 1^m\ +17^\circ 16'$	213-218
Diameters. Plates 9 25350 (out of focus)	219, 220

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Wednesday, October 20, 1915

Estimates of Brightness

09 36 56 W Ursae Majoris.

9.50

54m out. for examination

Plate reversed.

AI 174 2ff
8.2 8.3 1 825 01

AI 117
8.2 8.1 1 815 01

AI 156
8.0 7.9 1 795 01

AI 178
8.4 8.3 1 835 01

AI 330
t from 8.0 ? sup 34
Plate retained

AI 402
~~8.2 t from~~ t.p.

AI 417
7.8 7.9? 1 785 01

AI 445
7.7 8.0 -3 ~~785 12~~ Sup 34

AI 365
t from t.p.

Plate reversed.

AI 462
8.3 8.3 0 830 00

AI 516
8.2 trails ~~8.3~~
Too from Rijet

AI 533
8.1 8.0 1 805 10

AI 590
8.0 8.0 0 800 00

AI 600
8.0 7.8 2 790 11

AI 618
t from t.p.

AI 651
defective def.

AI 671
7.8 8.0 ? 2 ~~774 11~~ Sup 34

AI 689
8.3 8.3 0 830 00

Diff No.
-1 2
-3 1
+1 3

0 3
-2 1
+1 1
+2 1

Wednesday, October 20, 1915.

Estimates (cont.)

Plate reversed.

AI 701
8.3 8.4 1 835 10

AI 726
t from t.p.

AI 746
8.5 8.4 1 845 10

AI 749
8.2 8.0 2 810 11

AI 757
t from t.p.

AI 761
t from t.p.

AI 789
7.9 7.8 1 785 10

AI 822
8.2 8.5 3 ~~835 21~~ Sup 34

AI 836
7.8 7.9 1 785 01

Plate reversed.

AI 846
8.5 8.5 0

AI 854
7.9 7.9 0

AI 856
8.4 8.4 0

AI 868
7.9 7.9 0

AI 883
t from t.p.

AI 885
t from t.p.

AI 890
t from t.p.

AI 894
8.0 8.2 2

AI 900
def def.

0 4
-2 1

0 2
-3 1
+1 2
+2 1

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Wednesday, October 20, 1915

Estimates (cont.)

AI 922 Plate reversed
8.2 8.4 2

AI 935
toporr t.p.

AI 942
8.2 8.3 1

AI 961
t.p. t.p.

AI 988
7.9 8.2 3 Sup. 34

AI 973
8.4 8.4 0

AI 993
7.9 7.9 0

AI 1471
t.p.orr t.p.

AI 1477
t.p.orr t.p.

Diff Ms.
0 2
-1 1
-2 1
-3 1

Plate reversed

AI 1009
8.2 8.4 2

AI 1017
t.p.orr. t.p.

AI 1044
7.7 7.8 1

AI 1032
t.p.orr t.p.

AI 1660
8.0 8.0 0

AI 1684
7.8 7.8 0

AI 1114 not identd.
~~7~~

AI 1716
7.8 7.9 1

AI 1134
7.9 7.8 1

Diff
0 2
-1 2
-2 1
-3 1

Wednesday, Oct. 20, 1915

Estimates (cont)

Plate reversed

AI 1135
7.9 7.8 1

AI 1513
8.2 8.0 2

Dup to this pt nrm
8.0 +60. AI 1539
Reject ~~8.2 t.p.~~

AI 1563
7.9 8.1 2

AI 1578
7.8 7.9 1

AI 1587
t.p.orr t.p.

AI 1612
Reject ~~7.8 t.p.~~

AI 1631
7.8 7.8 0

AI 1647
7.9 7.8 1

Diff Ms.
0 1
-1 1
-2 1
+1 2
+2 1

Plate reversed

AI 1685
7.8 7.9 1

AI 1715
7.9 7.9 0

AI 1767
t.p. t.p.

AI 1781
t.p. t.p.

AI 1801
8.0 8.3 3 Sup. 35

AI 1832
8.3 8.0? 3 Sup. 35

AI 1840
8.4 8.3 1

AI 1881
8.5 8.2 3 Sup. 35

AI 1896
t.p.orr t.p.

Diff
0 1
-1 1
-3 1
+1 1
+3 2

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Estimates (cont.)

Plate reversed

AI 1921
8.3 8.2 1

AI 1935
Reject 8.0 t.p.

AI 1970
8.4 8.5 1

AI 1981
7.9 8.0 1

AI 1994
8.0 8.1 1

AI 2001
8.1 8.2 1

AI 2031
8.0 8.3 3 Sep. 25

AI 13579
8.1 8.0 1 Sep. 23

AI 10877 see also p. 24
8.0 7.9 1

Diff
0 4
-1 1
-3 1
+1 3

Plate reversed

AI 11132
7.9 8.0 1

AI 5487
8.0 8.0 Sep. 19

AI 8374
8.5 8.5 0 Sep. 19

AI 3596
8.0 8.1 1

AI 3242
t.p. t.p.

AI 3267
t.p. t.p.

AI 3308
8.5 8.3 2

AI 3330
t.p. t.p.

AI 3339
t.p. t.p.

0 2
-1 4
+2 1

Wednesday, Oct. 20, 1915

Estimates (cont.)

Plate reversed

AI 3368
7.9 8.0 1

AI 3391
7.8 8.1 3

AI 3403
t.p. t.p.

AI 3418
8.5 8.4 1

AI 3452 3542
8.0 8.0 0

AI 3482
8.5 8.5 0

AI 3506
t.p. t.p.

AI 3514
t.p. t.p.

AI 3533
t.p. t.p.

0 2
-1 1
-3 1
+1 1

Plate reversed

AI 3556
t.p. t.p.

AI 3561
8.4 8.4 0

AI 3604
8.5 8.4 ?1

AI 3630
to ft. t.p.

AI 3643
8.0 7.9 1

AI 3653
8.0 7.8 2

AI 3680
8.5 8.5 0

AI 2054
t.p. t.p.

AI 2109
8.5 8.5 0

0 2
+1 2
+2 1

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Wednesday, Oct. 20, 1915.

Estimates (cont.)

	Plate			
AI 2143	8.4	8.4	0	
AI 2151	8.0	8.1	1	
AI ~~2168~~ 2239	tp.	tp.		
AI 2243	7.9	7.9	0	
AI 2251	8.0	8.0	0	
AI 2268	8.4	8.3	1	
AI 2275	tp.	tp.		
AI 2280	7.9	7.8	1	
AI 2293	7.9	7.9	0	

	Plate			
AI 2300	8.4	8.4	1	
AI 2315	8.0	7.9	1	
AI 2323	7.9	8.0	1	
AI 2335	7.9	8.0	1	
AI 2340	8.5	8.2	3	
AI 2354	7.9	8.1	2	
AI 2358	7.9	7.9	0	
AI 2371	8.4	8.2	2	
AI 2377	8.2	8.0	2	

Wednesday, Oct. 20, 1915.

Estimates (cont.)

	Plate			
AI 2411	8.1?	8.0?	1	Another image on plate.
AI 2431	7.9	7.9	0	
AI 2435	8.0	8.0	0	
AI 2442	8.0	7.9?	1	
AI 2492	tp.	tp.		
AI 2510	tp.	tp.		
AI 2743	7.9	8.0	1	
AI 2599	tp.	tp.		
AI 2801	7.9	8.0	1	

	Plate			
AI 2818	8.1?	7.9?	2	
AI 2833	8.1	8.2	1	
AI 2841	8.1	8.1	0	
AI 2862	7.9	8.0	1	
AI 2916	t.p.	t.p.		
AI 2944	t.p.	t.p.		
AI 2986	t.p.	t.p.		
AI 2973	t.p.	t.p.		
AI 3029	7.9	7.9	0	

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Wednesday, Oct. 20, 1915.

Estimates. (cont.)

Plate number.		Plate number.	
aI 3066		aI 3183	
t.p.	t.p.	8.3	7.9 4
aI 3083		aI 3199	
7.9	8.1 2	7.9	8.0 1
aI 3061		aI 3230	
t.p.	t.p.	8.3 ?	8.2 1 very p. 34
aI 3102		12 20	
8.2	8.3 1	glo m.	
aI 3042			
t.p.	t.p.		
aI 3000			
t.p.	t.p.		
aI 3127			
8.0	7.9 1		
aI 3141			
8.3	8.0 3		
aI 3182			
does not occur reg.			

Table I
Diff. (1) - (2)

Diff	No.	Product
0	28	0
-1	24	-24
-2	7	-14
-3	6	-18
+1	24	+24
+2	8	+16
+3	4	+12
	101	+52
		-56

Av. Diff. = ± 0.10

Table II
Diff (1) - (2) and magn. (1)

+2	+3	-2	-3
8.0	7.7	7.8	8.2
8.2	8.3	8.0	7.9
8.5	8.5	8.2	8.0
8.4	8.5	8.2	8.0
8.2	8.3	7.9	7.8
8.1		7.9	
		7.9	
14	13	45	49
6	5	7	5
8.23	8.26	7.99	7.98

No systematic diff. of sign if all magn. are considered. But large positive diff. has av. value for (1) of 8.25 and large neg. diff. " " " 7.98

-1	2
-2	1
+1	2
+3	1
+4	1

Thursday, Oct. 21, 1915

Estimates of W. Ursae Majoris (cont.)

11.50	Plate number.		Plate number.
	aI 5764	aI 5656	
	8.2	t.p.	
	aI 5775	aI 5698	
	7.9	8.0-1	7.9 8.0-1
	aI 5833	aI 5741	
	8.4	8.2+2	8.4 t.p. Rigid plate
	aI 5870	10h+60. aI 5029	
	t.p.	8.1	8.2-1
	aI 5891	aI 5045	
	t.p.	t.p.	
	aI 5867	aI 5048	
	t.p.	t.p.	
	aI 5003	aI 5061	
12h+60.	8.5	8.4+1	7.8 7.9-1
	aI 5685	aI 5067	
	8.5	8.4+1	8.0 7.9+1
	aI 5667	aI 5092	
	t.p.	t.p.	

-1	1
+1	2
+2	1

-1	3
+1	1

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Thursday, Oct. 21, 1915

Estimates, (cont)

Plate rumnd.

AI 5345
8.2 8.2 0

AI 5357
Repeat, to from ~~7.9 8.2 -3~~

AI 5390
7.8 8.0 -2

AI 5391
t/p.

AI 5415
t/p

AI 5467
7.9 8.0 -1

AI 5525
7.9 8.2 -3 See p. 35

AI 5545
t/p.

AI 5596
7.8 7.9 -1

Plate rumnd.

AI 5605
t/p.

AI 5810
broken.

AI 6238
t/p.

AI 6311
8.4 8.2 +2

AI 6389
8.3 8.3 0

AI 6431
t/p. 8.0 Repeat plate

AI 6444
8.5 8.3 +2

AI 6465
8.2 8.1 +1

AI 6475
8.4 8.2 +2

0 1
+1 1
+2 3

Thursday, Oct. 21, 1915

Estimates (cont)

Plate rumnd.

AI 6506
t/p.

AI 8698
8.0 8.1 -1

AI 3728
8.1 8.0 +1

AI 3743
7.9 8.2 -3 See p. 34

AI 3767
8.5 8.5 0

AI 3786
8.5 8.3 +2

AI 3792
8.4 8.1 0

AI 3802
8.4 8.4 0

AI 3817
t/p.

Plate rumnd.

AI 3823
8.2 8.4 -2

AI 3842
7.9 7.9 0

AI 3873
7.9 8.0 -1

AI 3896
7.9 7.9 0

AI 4318
7.9 7.9 0

AI 4328
t/p.

AI 4368
t/p.

AI 4378
7.9 8.0 -1

AI 4378
7.9 7.9 0

0 3
-1 1
-3 1
+1 1

0 1
-1 2
-2 1

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Thursday. Oct. 21, 1915.

Estimates cont.

Plate numbd.		Plate numbd.	
AI 4412	t/p.	AI 4688	t/p.
AI 4432	8.0 8.2 -2	10h+60 AI 4719	8.5 8.5 0
AI 4547	dom't am. ng.	10h+60 AI 4753	8.1 8.2 -1
AI 4585	8.4 8.5 -1	AI 4800	8.1 8.1 0
AI 4639	t/p.	AI 4814	8.2 8.1 +1
AI 4649	8.3 8.3 0	AI 4835	7.9 7.9 0
AI 4654	8.1 8.0 +1	AI 4854	8.0 7.9 +1
AI 4679	8.4 8.2 +2	AI 4874	8.4 8.4 0
AI 4681	7.9 8.0 -1	AI 4888	8.2 8.1 +1

0 1
-1 2
-2 1
+2 1

0 4
-1 1
+1 3

Thursday. Oct. 21, 1915.

Estimates, (cont.)

Plate numbd.		12.36 Plate numbd.	
AI 4899	8.1 7.9 +2	AI 7555	8.2 8.0 +2
AI 4921	8.5 8.7 -2	AI 7570	7.9 7.8 +1
AI 4935	t/p.	AI 7585	8.3 8.5 -2
AI 4943	8.6 8.6 0	AI 7604	7.9 8.2 -3 Sep. 35
AI 4963	8.4 8.2 +2	AI 7607	8.5 8.3 +2
AI 4975	8.1 8.1 0	AI 7616	t/p.
AI 5613	8.6 8.5 +1	AI 7617	7.9 7.9 0
AI 5618	7.9 8.1 -2	AI 7637	8.4 8.2 +2
AI 5639	t/p.	AI 7654	8.4 8.4 0

0 2
-2 2
+1 1
+2 2

12.35 gbm.

0 2
-2 1
-3 1
+1 3

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Thursday, Oct. 21, 1915.

Estimates (cont.)

Plate measd		Plate measd.	
AI 7665	8.1 8.0 +1	AI 7802	8.0 7.9 +1
AI 7673	8.3 8.2 +1	AI 7815	7.9 7.8 +1
AI 7685	trails 7.8 7.9 -1	AI 7826	t/p.
AI 7689	7.9 8.0 -1	AI 7856	7.8 7.9 -1
AI 7695	7.9 7.9 0	AI 7857	don't measure.
AI 7710	7.9 7.9 0	AI 7257	7.9 8.1 -2
AI 7725	trails	AI 8096	trails
AI 7782	7.9 7.9 0	AI 8109	trails
AI 7789	8.0 8.1 -1	AI 8120	t/p.

0 3
-1 3
+1 2

-1 1
-2 1
+1 2

Thursday, Oct. 21, 1915

Estimates cont.

Plate measd		Plate measd.	
AI 8201	t/p.	AI 8435	8.2 8.2 0
AI 8221	8.0 7.9 +1	AI 8452	8.3 8.1 +2
AI 8298	8.2 8.2 0	AI 8459	8.0 8.1 -1
AI 8257	t/p.	AI 8488	8.2 8.3 -1
AI 8319	8.4 8.5 -1	AI 8491	8.5 8.5 0
AI 8358	8.5 8.3 +2	AI 5487	f.s. 8.0 8.0 8.2 8.2 0 2nd measr Sept 8 → 8.10 11 11
AI 8374	f.s. 8.5 8.5 8.5 8.6 × 8.52 0001	AI 6525	t/p.
AI 8398	7.9 7.9 0	AI 6543	8.1 8.1 0
AI 8411	7.9 8.0 -1	AI 6561	t/p.

0 2
-1 3
+1 1
+2 1

0 4
-1 2
+2 1

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Thursday, Oct. 21. 1915.

Estimates (cont.)

Plate turned.

AI 6587
8.0 8.1 -1

AI 6602
8.4 8.2 +2

AI 6619
8.3 8.1 +2

AI 6625
8.0 7.9 +1

AI 6642
+p.

AI 6646
7.9 7.9 0

AI 6658
8.2 8.3 -1

AI 6681
8.5 8.3 +2

AI 6701
7.8 7.9 -1

0 1
-1 3
+1 1
+2 3

Plate turned.

AI 6706
8.4 8.4 0

AI 6716
8.3 8.2 +1

AI 6726
8.0 8.0 0

AI 6731
7.9 7.9 0

AI 6734
8.0 8.0 0

AI 6756
8.1 8.0 +1

AI 6758
+p.

AI 6769
+p.

AI 6768
+p.

0 4
+1 2

Thursday, Oct. 21, 1915

Estimates, (cont.)

Plate turned

AI 6770
+p.

AI 6776
8.0 8.0 0

AI 6781
7.9 8.2 -3

AI 6783
+p.

AI 6786
8.0 8.1 -1

AI 6791
+p.

AI 6794
8.0 8.0 0

AI 6804
7.9 7.9 0

AI 6809
7.9 7.9 0

0 4
-1 1
-3 1

Plate turned.

12h. AI 6818
+p.

AI 7165
Trails 7.9 7.9 0

AI 7180
Q trails 7.9 8.0 -1

AI 7237
+p.

AI 7277
7.9 7.9 0

AI 7324
8.5 8.4 +1

AI 7353
7.9 7.9 0

AI 7438
8.4 8.3 +1

AI 7456
8.3 8.1 +2

0 3
-1 1
+1 2
+2 1

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Thursday, Oct. 21, 1915

Estimates (cont.)

Plate reversed.

aI 7458
7.9 t/p

aI 7475
8.3 8.2 +1

aI 7508
8.2 8.0 +2

aI 7518
8.5 8.5 0

aI 7529
7.9 8.0 -1

aI 7552
8.2 8.2 0

1.19
J.C.W.

0 2
-1 1
+2 1
+2 1

Diff	No.	Product
0	41	0
-1	26	-26
-2	8	-16
-3	5	-15
+1	20	20
+2	18	36
+3	0	0
	118	56-57

Av. Diff ± 0.08

Saturday, October 23, 1915.

Estimates of M Ursae Majoris.

10. 00

Plate reversed.

aI 13348
8.5 8.4 1

aI 13358
8.0 8.2 2

aI 13371
8.4 8.4 0

aI 13382
8.3 8.3 0

aI 13391
8.4 8.5 1

aI 13434
8.5 8.5 0

aI 13463
8.4 8.4 0

aI 13478
8.2 8.0 2

aI 13529
7.9 8.1 2

0 4
-1 1
-2 2
+1 1
+2 1

Plate reversed.

aI 13579
(+8.) 8.1 8.0 8.2 2 8.05 0.11 2d meas. excl. 8

aI 13588
8.1 7.9 2

aI 13643
8.4 8.2 2

aI 13661
8.4 8.3 1

aI 13679
8.1 8.1 0

aI 13686
8.5 8.5 0

aI 13696
8.3 8.3 0

aI 13713
8.2 8.0 2

aI 13770
8.1 8.2 1

0 3
-1 1
-2 2
+1 1
+2 2

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Saturday, October 23, 1915

Estimates sent.

Plate measured		Plate measured	
AI 13793		AI 10400	
8.0 8.0	0	8.0 8.0	0
AI 13809		AI 10431	
8.0 7.9	1	8.4 8.3	1
AI 13826		AI 10469	
7.9 7.9	0	8.2 8.1	1
AI 13916		AI 10484	
t/p.		8.5 8.5	0
AI 14072		AI 10498	
8.0 8.1	1	8.5 8.5	0
AI 14282		AI 10552	
8.3 8.2	1	8.2 8.2	0
AI 14258		AI 12292	
7.9 8.0	1	8.1 8.0	1
AI 10356		AI 12297	
8.3 8.2	1	8.3 8.4	1
AI 10386		AI 12304	
) broken		8.0 8.1	1

0 2
−1 2
+1 3

0 84
−1 2
+1 3

Sat. Oct. 23, 1915

Estimates sent)

Plate measured		Plate measured	
AI 12309		AI 12503	
t/p.		7.9 7.8	1
AI 12367		AI 12511	
8.5 8.5	0	7.9 8.1	2
AI 12376		AI 12531	
8.3 8.3	0	7.8 8.1	3 Sup. 34
AI 12425		AI 12889	
8.4 8.5	1	8.1 8.0	1
AI 12450		AI 12922	
8.0 8.1	1	8.0 8.2	2
AI 12457		AI 13001	
8.0 8.1	1	7.9 8.0	1
AI 12465		AI 13033	
8.4 8.4	0	7.9 7.9	0
AI 12472		AI 13079	
8.3 7.9	4 Sup. 34	t/p.	
AI 12479		AI 13149	
8.2 8.1	1	7.9 8.0	1

0 3
−1 3
+1 1
+4 1

0 1
−1 2
−2 1
+1 2

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Sat, Oct. 23, 1915

Estimates (cont.)

Plate measured		Plate measured	
aI 13237		aI 11280	
8.1	8.4 3 Sep. 34	8.4	8.0 4 Sep. 34
aI 13247		aI 11343	
8.3	8.2 1	8.2	8.0 2
aI 13288		aI 11366	
8.4	8.5 1	7.9	7.9 0
aI 13297		aI 11370	
8.2	7.8 4 Sep. 34	8.0	8.1 1
aI 13298		aI 11436	
8.4	8.5 1	+p.	
~~aI 8.4~~		aI 11807	
		7.9	8.1 2
aI 13331		aI 11818	
8.2	8.6 4 Sep. 34	7.9	8.0 1
aI 11237		aI 11947	
8.5	8.5 0	7.9	7.9 0
aI 11266		aI 11950	
8.1	8.2 1	7.9	8.0 1

Sat. Oct. 23, 1915

Estimates (cont.)

Plate measured		Plate measured.	
aI 11991		aI 12146	
8.4	8.5	8.1	8.0
aI 12003		aI 12148	
8.5	8.6	7.9	8.0
aI 12016		aI 12158	
+p.		8.1	7.9
aI 12021		aI 12183	
8.5	8.6	7.9	7.9
aI 12038		aI 12200	
8.1	7.9	8.2	8.0
aI 12062		aI 12209	
8.3	8.4	7.9	7.9
aI 12074		aI 12224	
8.1	8.1	7.9	8.0
aI 12119		aI 12238	
def.		7.9	7.9
aI 12134		aI 12245	
+p		8.0	8.0

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Sat. Oct. 23, 1915

Estimates, (cont.)

Plate reversed.

aI 12252 1048
7.8 8.1 See p. 34

aI 12282
8.0 7.9

aI
10.46

Plate reversed.

aI 10538
8.1 7.9

aI 10561
8.0 7.9

aI 10587
7.9 8.1

aI 10609
8.2 8.0

aI 10628
8.3 8.2

aI 10693
~~8.6~~ t/p.

aI 10737
8.1 8.0

aI 10805
8.4 8.5

aI 10816
8.4 8.5

Sat. Oct. 23, 1915

Estimates cont

Plate reversed.

aI 10827
8.4 8.3

aI 10877
p.8) 8.0 ~~7.9~~ 8.0 7.9

aI 10883
7.8 7.9 7.8 8.01

aI 11132
8.0 8.0 8.0 0.0

aI 11147
8.4 8.2

aI 11153
7.9 8.0

aI 11168
8.0 7.9

aI 11186
8.0 7.9

aI 11221
8.4 8.3

Plate reversed.

aI 9751
t p.

aI 9760
8.0 7.9

aI 9769
8.1 8.1

aI 9774
8.2 8.2

aI 9783
8.1 8.1

aI 9789
8.4 8.3

aI 9812
7.9 7.8

aI 9817
7.8 7.8

aI 9826
8.1 7.9

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Sat. Oct. 23, 1915.

Estimate (cont)

Plate measured.		Plate measured.	
AI 9832		AI 8597	
~~7.9~~ t/p.		8.1	8.0
AI 9843		AI 8606	
t/p.		8.5	8.5
AI 9876		AI 8627	
7.8	7.9	8.0	8.0
AI 9894		AI 8638	
7.9	8.0	8.2	8.0
AI 9884		AI 8653	
t/p.		t/p.	
AI 10152		AI 8663	
t/p		8.1	7.9
AI 10193		AI 8681	
t/p		8.0	7.9
AI 10201		AI 8693	
7.9	7.9	8.5	8.5
AI 8535		AI 8738	
8.2	8.2	8.3	8.3

Sat. Oct. 23, 1915.

Estimates, (cont)

Plate measured.		Plate measured.	
AI 8749		AI 8861	
8.5	8.4	t/p.	
AI 8772		AI 8873	
8.5	8.3	7.9	7.9
AI 8783		AI 8896	
def.		8.3	8.5
AI 8790		AI 8943	
8.4	8.4	8.2	8.0
AI 8825		AI 8948	
8.1	8.0	7.8	7.9
AI 8835		AI 8902	
8.4	8.4	t/p.	
AI 8838		AI 8917	
8.1	8.2	t/p	
AI 8842		AI 9220	
8.0	7.9	t/p	
AI 8853		AI 9234	
8.0	7.9	t/p.	

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Sat. Oct. 23, 1915

Estimate (cont.)

Plate reversed.	Plate reversed.
AI 9313	AI 9563
+p.	8.0 8.1
AI 9402	AI 9569
8.0 8.0	8.1 8.0
AI 9330	AI 9604
+p.	7.9 8.0
AI 9433	AI 9610
8.1 7.9	7.9 7.9
AI 9474	AI 9634
8.0 8.0	+p.
AI 9497	AI 9646
8.4 8.3	8.1 7.9
AI 9532	AI 9638
8.2 8.3	+p
AI 9540	AI 9697
8.1 7.9	+p.
AI 9565	AI 9704
8.1 7.9	8.4 8.4

Sat. Oct. 23, 1915

Estimate (cont.)

Plate reversed.
AI 9716
8.3 8.5
AI 9719
8.3 8.4

11 25
J.B.M.

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Sat. Oct. 23, 1915

Dissordant Plates remeasured. W. Ursae Majoris

11.27

Plate numbered

AI 12472
p25 8.3 7.9 8.1 8.0 808 2 2 0 1

AI 12531
p.20 7.8 8.1 8.2 8.1 805 2 1 2 1

AI 13237
p.26 8.1 8.4 8.1 8.0 815 1 2 1 2

AI 13297
p.26 8.2 7.8 8.2 8.0 805 2 2 2 0

AI 13331
p.26 8.2 8.6 8.5 8.5 845 2 2 1 1

AI 11280
p.26 8.4 8.0 8.2 8.1 818 2 2 0 1

AI 12252
p28 7.8 8.1 8.2 8.1 805 2 1 2 1

AI 3230
p12 8.3 8.2 8.3 8.2 825 1 0 1 0

AI 5,16

Plate numbered

AI 330
p4 8.0 7.9 8.0 797.0 1 1 0

AI 445
p4 7.7 8.0 7.9 7.9 788 2 1 0 0

AI 671
p4 7.6 8.0 8.1 8.0 798 2 2 0 1 0

AI 822
p5 8.2 8.5 8.2 8.4 832 1 2 1 1

AI 988
p6 7.9 8.2 8.3 8.4 820 2 0 1 2

AI 1935
p8 +p.

AI 1612
p7 +p.

AI 1539
p7 +p.

AI 2031
p8 8.0 8.3 8.3 8.0 815 2 1 1 2

Sat. Oct. 23, 1915.

Diss. Plates remeasured (cont.)

Plate numbered.

AI 1881 AJ 3391
p7 8.5 8.2 8.3 8.2 830 2 1 0 1 p9

AI 1832 AJ 2340
p7 8.2 8.0 7.9 7.9 802 3 0 1 1 p10

AI 1801 AJ 3141
p7 8.0 8.3 8.2 8.1 815 2 1 0 1 p12

AI 7604 ~~AJ 7604~~
p17 7.9 8.2 8.2 8.0 808 2 1 1 2 ~~p17~~

AI 5357 AJ 6781
reject see p.14 p14 7.9 8.2 T p p21

AI 5525
p14 7.9 8.2 8.0 8.3 810 2 1 1 2

AI 3743
p15 7.9 8.2 8.2 8.2 812 2 1 1 1

11.40
J.C.M.

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Wednesday. Oct. 27, 1915

Examination of Plates for Region of Best Definition.

For determining limits beyond which star objects shall be called "near edge."

Marks are made on plates in four directions from center, indicating limits beyond which images begin to be noticeably poorer.

Plate	Diameters East + West mm	Diameters North + South mm	
AC 11744	102	108	
am 9429	80	86	poor
am 2608	110	119	
am 2600	128	126	
AC 11802	125	131	
AC 11930	114	120	
AC 11918	115	125	
AC 5053	140	140	
	114	115	
Mean	114	119	

Diameters a little larger north + south than east and west, probably affected by larger dimensions of plate.

It would seem to be safe to call any distance near edge, which is more than 60 millimetres (about 10/10) from edge

Wed. Oct. 27, 1915

Limits of Definition Contd.

Plate	Diameters E + W	Diameters N + S	Extremely Poor E + W	Extremely Poor N + S
D 17395	85	75	122	115
D 16793	72	85	110	110
16754	75	73	98	98
Mean	77	78	107	108

on 2 plates

For good measures, one cannot go beyond 40 mm from the centre, and images more than 55 mm from centre are extremely poor

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Friday, November 26, 1915

R Lyncis.
Re-examination of discordant plates

1 20 AC 1334 See
n.s. < 12.9

MC 2975 See 39:38 Mt 10.3
10.2? bright, difficult Take mean 10.04, 10.2, 10.3, and enter ?.

AC 13866 Mt 10.8? 10.
10.6? 7 Take mean

AC 1428 See I 139
n.s. < 11.1 Reject first measure. Too uncertain.

AC 13860 Mt 10.9?
11.0 7 Take mean

AC 598 See I 156
Too faint Reject first measure

AC 13878 Mt 10.9?
11.1? very faint Take mean

MD 2975 See 37:28 Mt. 10.0
10.4 Take mean {10.4 / 10.24} Reject 10.0, certainly faint.

AD 178 See I 166
7? < 11.4 Reject first observation.

1 35 24568 n.s. < 14.4

Saturday, December 4, 1915

U Coronae. Comparison Stars.
Estimates of magnitude comparisons for Stars α, β, γ (corresponding to a, d, g of Professor King's sequence) in terms of p.c. on Plate of

MC 5575 MC 5351 (P) MC 5355 (P)

α	6.4?	> 6.5	> 6.5
β	7.6?	7.1?	7.35?
γ	9.3	9.2	9.25
7.34 a 2 β, β 2 7.82			Aβ 7.58 24,04
9.07 f 4 γ, γ 2 g 9.47			γ 9.47 00, 00

MC 6004 MC 6003 MC 6008

α	> 6.5	> 6.5	> 6.5
β	7.2?	7.2?	7.20?
γ	9.4	9.5	9.45?
f 5 γ, γ 1 g			β 7.48 23,09
a 0 β, β 3 b			γ 9.57 00,00

MC 7988 MC 7983 MC 7988

α	> 6.5	6.3?	6.3?
β	7.2?	7.2	7.20
γ	9.2	9.1	9.15
f 3 γ, γ 2 g			β 7.53 23,09
a 1 β, β 2 b			γ 9.42 25,05

MC 8399 MC 8397 MC 8402

α	6.3?	6.3?	6.3?
β	7.2	7.1	7.15
γ	9.2	9.4	9.30
f 4 γ, γ 2 g			β 7.43 23,09
a 0 β?, β 3 b			γ 9.47 00,00

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U Cornae Cont.

Diffraction maxima of King's stars α, β, γ
Compared with Cleo in. of Sep.

MC ~~7988~~ ~~2355~~

α p.c. 9.67 g pc 5 α pc d 2 l pc 10.37 — 10.17, 10.17 — 10.17 − 3.74 = 6.43

β — 10.64 K 3 β d 1 l 11.02 — 10.94, 10.92 — 10.93 − 3.74 = 7.19

p.C Comp. γ — ~~13.64~~ h 2 γ d 3 D 14.42 — ~~13.84, 14.12~~ — ~~13.98 − 3.74 = 10.24~~

α — h5 from

MC 8399

9.67 g p.c. 5 α pc d ~~+ b pc~~ — 10.17 — 10.22 05, 05 — −3.74 = 6.48

α pc d 1 h pc 10.37 — 10.27

~~b~~ 1

11.02 l 1 β d — 11.12 — 11.14 02, 02 — −3.74 = 7.40

β d 2 m 11.36 — 11.16

p.C. Comp. ~~13.64 h 1 γ d~~

~~γ d 4 D 14.42~~

12.70 f 4 γ d — 13.10 — 13.07 03, 03 — − 3.74 = 9.33

γ d 2 g 13.24 — 13.04

MC 7988

12.70 f 3 γ d — 13.00 — 12.97 03, 03 — −3.74 = 9.23

γ d 3 d 13.24 — 12.94

Saturday, Dec. 11, 1915

Scale R — The Pleiades Yellow Light

Measures of Bright Stars in MC 7449 & supplement those made by O'R 16: 162-165

	MC 7449				Cor. ~~O'R16~~	O'R16	
17	2.0	2.0	2.00	00	2.30		Diff.
18	2.7 f	2.9	~~2.80~~ 2.75	11	3.10		
19	3.3 f	3.2	3.25	10	3.55		
20	~~3.4~~ f	3.1	3.10	00	3.40		
21	3.0	3.2	3.10	00	3.40		
22	4.0 f	4.1	4.05	01	4.35		
23	4.8 f	4.7	4.75	01	5.05		
24	4.3 f		4.8	2	5.1		
25	5.0 f	4.9	4.95	01	5.25		
D 26	4.1 f	t.f.	t.f.		~~4.4~~ t.f.		
27	7.1	7.2	7.15	10	7.45	7.4	05
28	7.7	7.7	7.70	00	8.00	7.9	10
29	5.9	5.9	5.90	00	6.20	6.4	20
30	8.2	8.4	8.30	11	8.60	~~8.4~~ 8.30	~~3~~ 30
31	.						
32	.						
29a	7.3	7.4	7.35		7.65	7.8	15

~~45~~ 35
5 2
+0.08

Second reading made with first covered

There appear to be no systematic differences between L and O'R. Take mean of two observers.

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Monday, December 13, 1915

U Sagittae. Estimate of brightness on Multiple-Image AC plates where fainter than normals.

On the following plate the variable is near maximum:

AC 8875	AC 357	AC 3755
2061	952	4411
2465	2050	
2438	8853	am 7699
2775	8868	1319
2774	8971	
2254	9919	
2302	5767	

2 55

AC 1459 Iro from
AC 2325
Im 1 -
2 7.1
3 7.1
4 7.0
6 7.0
7 7.0
9 7.3
11 7.5
8 hopeless
10 7.5

Plate fogged. Obs. difficult

Monday, Dec. 13, 1915

U Sagittae Cont.

AC 2634 Iro from

AC 2377
Im 1 7.3
2 7.4
3 7.8
4 9.1

AC 2420 Iro from

AC 2441
Im. 1 6.8
2 6.9
3 6.9
4 7.0
5 7.1
6 7.2
7 7.4

AC 2464 difficult

Im				Im					
1	✗ n.s. < 8.5			10	✗	n.s		2m 19	7.8
2	✗ n.s.				118	n.s.	8.2	20	7.4
3	✗ n.s.				12✗	7		21	7.4
4	✗ n.s.				13✗	7			
5	✗ n.s.				144	✗			
6	✗ n.s.				15✗	✗	8.2		
7	n.s.				16	8.1			
8	n.s.				17	4.			
9	n.s.				18	7.9			

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Monday, Dec. 13, 1915

3 30 U Sagittae Cont.

AC 2478

2m.1	6.8?	2m.7		2m.13	
2	6.7?	8		14	7.3
3		9		15	7.4
4		10		16	7.5
5	8	11		17	7.5
6		12	7.3	18	7.8
				19	n.s. (poor)

Darkness came on suddenly.
Cannot finish plate

Tuesday, December 14, 1915

10 10/10 U Sagittae. Multiple Gauge plate Cont.

AC 2478

2m 1	B	7	B	13	7.3
2		8	7.0	14	7.3
3	B	9	7.1	15	7.4
4		10	7.1	16	7.4
5	B	11	7.2	17	7.6
6	B	12	7.3	18	7.8
				19	7

AC 2479

1	7.9	5	8.7
2	8.0	6	9.0
3	8.2	7	9.3?
4	8.5		

AC 2535

1	8.0	7	B
2	7.7	8	B
3	7.5	9	B
4	7.3	10	B
5	B	11	B
6	B		

AC 2607 Film found marked with ink

1	8.3	7	7.5
2	8.3	8	7.5
3	8.0	9	7.4
4	7.9	10	7.2
5	7.8	11	7
6	7.6		

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U Sagittae Continued

AC 2608

1	7.0	4	B		
2	B	5	B		
3	B	6	B		

AC 2687

1	7.0?	6	7.4	11	7.7
2	B	7	7.4	12	8.9
3	B	8	7.5	13	8.0
4	B	9	7.6	14	8.0
5	7.3	10	7.7		

AC 2688

1	8.4	4	9.8
2	9.2	5	9.8
3	9.8		

AC 2729

1	B	12		23	7.9
2	B	13		24	8.2
3	B	14		25	8.4
4		15		26	8.6
5	B	16		27	8.7
6		17		28	9.0
7	B	18		29	9.5
8		19	B	30	9.7?
9	B	20	7.4	31	~~9.7?~~ sup.
10		21	7.5	32	n.s 7
11	B	22	7.6		

Tuesday, December 14, 1915

U Sagittae Cont.

AC 2776

1	n.s. 7	4	5 n.s 7
2	9.9	5	6 n.s 7
3	9.8	6	7 n.s 7
4	9.9		8 n.s. 7

AC 2830

1	8.17	5	8.5
2	7.7	6	8.6
3	8.0	7	t.p.
4	8.1	8	t.p.

AC 2831

1	t.p.	8		15	
2	9.7?	9		16	
3	t.p.	10		17	
4	t.p.	11		18	
5	9.7	12		19	
6		13		20	
7		14		21	

Plate 156 from

AC 2874

1	7.9
2	8.2
3	8.4

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Tuesday, December 14, 1915

ν Sagittae Cont.

AC 2934

1	8.8	5	9.6
2	t.p.	6	9.7
3	t.p.	7	97
4	t.p.		

AC 2962

1	7.5	5	B
2	74	6	6.9
3	73	7	B
4	7.2		

AC 9879
Trails - too faint

12 00

The abm observations were always made in irregular order, mean in the order of exposure, and are certainly independent, notwithstanding the very great difficulty on plates having many exposures.

Magnitudes employed: B 6.0 : b 6.3 ; b' 6.6 ; [b² 6.7] ; a 6.9 ; a' 7.3 ; a² 7.5 ; g 8.0 ; [f 8.1] ; [c 8.1] ; l 8.4 ; K 8.9 ; k 9.1 k' 9.7 [k² 9.7] o 10.2. Magnitudes in brackets not used.

Final magnitudes including grades change a' to 7.2, g to 7.9, and k' to 9.6. Co several stars were used for observations, final results would be little if at all changed.

Wednesday, Dec. 15, 1915

ν Pegasi Star c' inverted between c and d. Estimates of brightness

MC 3883 p.c

9.82 C 3 c' 10.12 10.18 06,07
c' 5 d 10.15 10.25

MC 3883 rev

c 5 c' 10.32 10.34 02,01
c' 4 d 10.35

MC 6324 p.c of c' a defective

AC 16939

c 5 c' 10.32 10.34 02,01
c' 4 d 10.35

AC 16939 rev

c 5 c' 10.32 10.28 04,03
c' 5 d 10.25

MC 3715 p.c

c 5 d c' 10.32 10.38 06,07
c' 3 d 10.45

MC 3715 p.c rev

c 4 c' 10.22 10.28 06,06
c' 4 d 10.35

AC 17021

c 4 c' 10.22 10.24 02,01
c' 5 d 10.25

AC 17021 rev

c 3 c' 10.12 10.18 06,07
c' 5 d 10.25

AC 16789

c 5 c' 10.32 10.20 03,03
c' 5 d 10.25

AC 16789 rev

c 5 c' 10.32 10.34 02,01
c' 4 d 10.35

Sum 284
No. 10
Mean 10.28 10,06,10,04,00,06,00,00,10,06 +28 −24 ± 0.052
OR 2:83 Mean OR 10.40
Adopted Mean, 10.34 06,06

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3.30

Wednesday Dec. 22. 1915

U Sagittae (Plate Reversed)

~~aI 183~~		aI 705	
aI 345			6.2.
	6.5.		
aI 221		aI 731	
	6.5.		6.5.
aI 232			
	6.4.	aI 824	
aI 263			6.4.
	6.4.		
aI 297		aI 878	Too poor
	6.4.		
aI 275		aI 930	Too poor
	6.3.		
aI 323		aI 978	6.5
	6.3.		
aI 325		aI 1029	6.5
	6.4.		
aI 336		aI 1043	6.4
	6.5.		
aI 376		aI 1066	6.5.
	6.4.		
aI 404		aI 1083	6.5.
	6.4.		
aI 411		aI 1096	6.4.
	6.4.		
aI 460		aI 1139	6.5.
Too poor			

Lo.

Wednesday, Dec. 22, 1915

U Sagittae (cont.)

aI 1162	6.4.	aI 1454	6.4.
aI 1187	Too poor.	aI 1459	Too poor.
aI 1196	not seen <97.	aI 1488	6.5.
aI 1205	6.4.	aI 1550	broken.
aI 1227	6.4.	aI 1556	6.3.
aI 1250	6.4.	aI 1579	6.4.
aI 1258	6.5.	aI 1589	6.4.
aI 1280	6.4.	aI 1663	6.4.
aI 1365	6.5.	aI 183	6.3p Trails.
aI 1385	6.4.		
		aI 1709	6.4.
aI 1408	Too near day.		
		aI 1745	6.4.
aI 1416	6.5.		
		aI 2198	not seen <96
aI 1422	6.5.		
		aI 2224	6.3.
aI 1437	6.4.		
		aI 2246	6.4.

Lo

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Wednesday, Dec. 22, 1915

U Sagittae (cont.)

aI 2263	6.3	aI 2567	6.5		
aI 2305	6.4	aI 2600	6.5		
aI 2318	6.4	aI 2639	6.4		
aI 3337	6.4	aI 2672	6.5		
aI 2349	7.8	aI 2682	6.4		
aI 2361	6.5	aI 2707	7.8		
aI 2386	6.4	aI 2734	6.4		
aI 2403	6.4	aI 2739	6.5		
aI 2426	6.4	aI 2745	6.5		
aI 2452	6.4	aI 2786	6.4		
aI 2459	6.6	aI 2820	between < 9.2		
aI 2480	6.4	aI 2855	6.4		
aI 2509	6.4 trails	aI 2864	6.4		
aI 2539	6.4	aI 2884	6.5		

28-

Wednesday, Dec. 22, 1915

U Sagittae (cont.)

aI 2910	6.5
aI 2933	6.5
aI 2945	6.4
aI 2959	6.5
aI 3002	6.4
aI 3088	6.5
aI 3121	6.5
aI 3173	6.5
aI 3351	6.4

4.10

H.S.Lo

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10.55 Thursday, Dec. 23, 1915

U Sagittae (plates reversed)

aI	3385	6.5	aI	3759	6.4
aI	3445	6.5	aI	3796	6.4
aI	3467	6.5	aI	3827	Too poor
aI	3488	6.5	aI	3851	6.5
aI	3558	6.6	aI	3872	~~not seen~~ < 9.2
aI	3552	~~not~~ F 9.?	aI	3885	Too poor
aI	3602	6.4	aI	3902	6.4
aI	3917	6.5	aI	3905	6.4
aI	3627	6.5	aI	3923	6.3 very poor
aI	3675	6.5	aI	3928	Too poor
	~~3886~~		aI	3963	6.4
aI	3686	6.5	aI	3968	6.5
aI	3713	6.4	aI	4009	Too poor
aI	3739	6.5	aI	4025	6.4 Lo.

27-4

Thursday, Dec. 23, 1915

U Sagittae (cont.)

aI	4046	Too poor	aI	4405	6.4
aI	4088	6.5 P	aI	4427	6.4
aI	4059	~~n.s. <7.2~~ 7.1 p	aI	4435	6.5
aI	4119	Too poor	aI	4438	J. P.
aI	4124	Too poor	aI	4537	6.5
aI	4136	6.5	aI	4541	6.5
aI	4155	6.5	aI	4574	6.6
aI	4177	Too poor	aI	4592	J. P.
aI	4221	Too poor	aI	4810	J. P.
aI	4263	6.6 E	aI	4895	~~7.0~~ 7.0? p
aI	4262	6.5	aI	4946.	6.4
aI	4289	6.5	aI	5007	6.5
aI	4380	6.5	aI	5024	6.0? E Lo.
aI	4344	6.5			

27-6

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Thursday, Dec. 23, 1915

U Sagittae (cont.)

aI	5026	6.5	aI	5257	6.5
aI	5052	6.5	aI	5264	6.5
aI	5074	6.5	aI	5277	6.4
aI	5087	J.P.	aI	5311	J.P.
aI	5108	6.4	aI	5397	6.5
aI	5119	6.4	aI	5408	6.6
aI	5124	6.5	aI	5434	6.3
aI	5132	6.5	aI	5492	9.6? F
aI	5144	6.5	aI	5542	7.8
aI	5155	6.5	aI	5756	E
aI	5179	6.4	aI	5857	6.5
aI	5189	6.4	aI	5864	6.4
aI	5209	n.s <12	aI	5885	7.4
aI	5230	6.3	aI	5901	6.4

Lo.

28-3

Thursday, Dec. 23, 1915

U Sagittae (cont)

aI	5908	J.P.	aI	6057	6.4
aI	5914	6.5	aI	6069	6.4
aI	5926	6.5	aI	6075	6.4
aI	5930	6.5	aI	6103	6.5
aI	5950	6.4	aI	6109	6.4
aI	5954	6.5	aI	6150	6.5
aI	5968	6.5	aI	6161	6.5
aI	5981	6.5	aI	6183	6.5
aI	5997	6.4	aI	6191	6.5
aI	6012	6.5	aI	6774	J.P.
aI	6024	6.5	aI	6813	6.4
aI	6032	6.5	aI	6829	6.6
aI	6037	J.P.	aI	6858	6.5
aI	6053	6.5	aI	6875	6.5

Lo.

28-3

11.22

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Thursday, Dec. 23, 1915

U Sagittae (cont.)

aI	6889	6.4	aI	7133	6.5
aI	6904	6.4	aI	7152	n.s. < 8.1 p
aI	6918	6.5	aI	7162	6.5
aI	6954	6.5	aI	7196	n.s. < 9.6
aI	6957	6.5			
aI	6962	6.4			
aI	7011	6.5			
aI	7024	6.4			
aI	7044	Doesn't identify			
aI	7063	6.6			
aI	7088	6.5			
aI	7089	6.5			
aI	7092	6.5			
aI	7124	6.5			

11.25
Lo.

Thursday, Dec. 23, 1915

11.34

U Sagittae (cont.)

aI	8128	6.5	aI	7357	6.4	
aI	8136	6.5	aI	7575	6.5	
aI	8146	7.9	aI	7691	6.5 i	
aI	8153	6.5	aI	7698	8.8	
aI	8161	6.5	aI	7754	9.2? s	Images on plate elongated. Variable circular
aI	8178	6.5	aI	7769	6.5	
aI	8186	6.4	aI	7819	6.4	
aI	8215	6.5	aI	7833	6.4	
aI	8242	6.5	aI	7837	6.9	
aI	8251	6.4	aI	7860	6.5	
aI	7221	6.7	aI	7869	6.4	
aI	7248	6.5	aI	7882	6.4	
aI	7268	6.5	aI	7983	6.4 i	
aI	7300	6.5	aI	7911	6.4	Lo.

11.40

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Thursday, Dec. 23, 1915

U Sagittae (cont.)

aI 7916 6.6

aI 7937 n.s. < 7.2 p

aI 7958 6.4

aI 7963 6.5

aI 7966 6.4i

aI 7999 6.5

aI 8010 6.5

aI 8021 J.P.

aI 8045 6.4

aI 8051 6.4

aI 8071 6.5

aI 8081 6.4

aI 8106 6.3 p

aI 8113 6.5

aI 9192 6.4

aI 9200 6.4

aI 9207 J.P.

aI 9213 6.5

~~9214~~

aI 9224 6.5

aI 9238 6.6

aI 9246 6.5

aI 9280 6.5

9304

aI ~~9304~~ 6.5

aI 9315 6.8

aI 9324 6.5

aI 9357 6.5

aI 9445 6.4 Le.

aI 9707 6.5v 11.4.8

28-2

Thursday, Dec. 23, 1915

U Sagittae (cont.)

aI 9779 6.4

aI 9811 6.3

aI 9899 6.4

aI 8270 ~~6.7~~ 6.4

aI 8301 6.5

aI 8306 6.4

aI 8312 6.4

aI 8338 6.5

aI 8502 J.P.

aI 8683 9.8? f

aI 8741 6.5

aI 8778 6.4

aI 8802 6.7

aI 8859 6.5

aI 8872 6.4

aI 8905 6.4

aI 8988 ~~n.s. <~ 7.9 F~

aI 9011 6.5

aI 9017 7.2

aI 9023 6.4

aI 9039 6.5

aI 9045 n.s. ~~< 8.4~~ < 8.2

aI 9055 6.5

aI 9067 6.5

aI 9072 ~~n.s.~~ 6.7 p

aI 9082 6.4

aI 9102 6.5

aI 9116 6.5 Le.

28-

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11.54 Thursday, Dec. 23, 1915

U Sagittae (cont.)

aI	9126	6.4	aI	11209	J.P
aI	9136	6.5	aI	11234	6.4
	~~94~~		aI	11264	6.3
aI	9148	6.4	aI	11287	6.5
aI	9154	6.5	aI	11412	J.P.
aI	9157	6.4	aI	11426	6.5
aI	9171	6.5	aI	11442	6.5
aI	9178	7.2	aI	11444	6.5 i
aI	11001	J.P	aI	11474	6.5
aI	11006	7.0	aI	11479	7.7
aI	11008	6.5	aI	11489	6.5
aI	11033	6.4	aI	11493	6.4
aI	11088	6.5	aI	11501	6.5
aI	11103	6.7? P	aI	11503	6.8

12.02
Lo.

Thursday, ~~Thursday~~ Dec. 23, 1915

U Sagittae (cont.)

aI	11506	6.5	aI	11637	6.5
aI	11509	6.5	aI	9920	6.5
aI	11514	6.5	aI	9925	6.5
aI	11521	6.5	aI	9926	6.5
aI	11523	6.4	aI	9932	6.4
aI	11530	6.5	aI	9938	6.4
aI	11548	6.4	aI	9950	6.5
aI	11557	6.5	aI	9952	6.4
aI	11562	6.5	aI	9954	7.0
aI	11568	6.6	aI	9962	6.5
aI	11576	6.5	aI	9967	7.8
aI	11586	n.s. <9.0	aI	9973	6.4
aI	11607	6.5	aI	9978	6.5
aI	11626	6.5	aI	9982	6.4

~~12.08~~
12.08
Lo.

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Thursday, Dec. 23, 1915

U Sagittae (cont)

~~9948~~			aI 10251	6.5	
aI 9988	6.5		aI 10261	6.5	
aI 10004	6.5		aI 10272	6.8	
aI 10009	6.8		aI 10284	6.4 E	
aI 10020	6.5		aI 10293	6.3	
aI 10035	6.4		aI 10332	6.4	
aI 10054	6.5		aI 10622	6.5	
aI 10063	6.5		aI 10714	Y.P.	
aI 10073	6.6		aI 10792	6.3	
aI 10093	6.5		aI 10876	6.4	
aI 10116	6.4		aI 10943	6.8 i	
aI 10123	6.4		aI 10954	6.5	
aI 10133	6.4		aI 10959	6.4	
aI 10163	6.5		aI 10980	6.4	
aI 10998	8.3		aI 10987	6.6	Lo. 12.14

29-1

12.18 Thursday, Dec. 23, 1915

U Sagittae (cont)

aI 11645	6.5		aI 12448	8.2?	7
aI 11659	6.5		aI 12544	6.4	
aI 11667	6.5		aI 12553	6.4	
aI 11672	6.5		aI 12587	6.3	
aI 11676	6.4		aI 12603	6.3	
aI 11717	6.5		aI 12648	6.4	
aI 11771	6.5		aI 12654	6.4	
aI 11825	6.6		aI 12664	6.4	
aI 11843	6.5		aI 12670	6.5 i	
aI 11854	6.5		aI 12678	6.5	
aI 11862	6.5		aI 12699	6.5	
aI 11905	6.4		aI 12704	6.5	
aI 11918	6.5		aI 12716	6.5	
aI 11933	6.4		aI 12726	6.4	

12.24 Lo.

28

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Thursday, Dec. 23, 1915

U Sagittae (cont.)

aI	12729	6.4		
aI	12741	6.4		
aI	12742	6.5		
aI	12764	6.4		
aI	12781	6.5		
aI	12788	6.5		
aI	12812	6.5		
aI	12820	6.5		
aI	12824	6.5		
aI	12839	6.4		
aI	12846	6.5		
aI	12854	6.5		
aI	12862	7.2	Broken plates were not observed	12.27 Lo.

13

3.04 Friday. Dec. 31, 1915

U Sagittae

aC	16633	9.7		aC 14334	7.4
	~~16628~~				
aC	16268	9.8		aC 14381	9.4
				am 4256	8.2
aC	15568	7.7			
				am 3108	9.8
am	8337	9.4			
				aC 4954	7.5
aC	9905	8.3			
				aC 5234	8.1
aC	10304	8.9			
				aC 6364	8.3
aC	10650	9.7			
				am 4889	8.2
aC	10836	9.8			
				am 6510	9.7
aC	10885	9.1			
				am 6944	9.9
aC	11541	9.8			
				am 7004	9.5
aC	11717	8.8			
				am 7218	9.7
aC	11939	8.3			
				aC 1849	9.3
aC	12490	9.8			
				aC 2209	8.5
aC	14238	9.7q		aC 2240	7.0q

3.15 Lo

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Friday, Dec. 31, 1915

U Sagittae (cont)

ac	2267	9.8	
ac	2353	9.6	f.f
ac	2354	8.8	
ac	2355	8.1	
ac	2356	7.8	
ac	2706	8.3	
ac	2707	8.9	
ac	3056	7.1	
ac	3057	8.0	
ac	3833	9.7	
am	510	9.5	

3.18 Lo.

11.14 Tuesday Jan 4 1916

Comp. Kei plates 2 23618 AC 116

RZ Carrissimae

aI	4486	6.3	Ret 6.4	1	6.35 10	aI 3289	7.2	Ret 7.5 = 7.38 ± 100 Su p. 71
aI	4484	6.2	6.3	1	6.25 01	aI 3278	6.3	6.3 x 6.30 00
aI	4449	6.5	6.4	1	6.45 10	aI 3264	6.4	6.3 x 6.35 0101
aI	12030	6.6	6.5	1	6.55 01	aI 10340	6.5	6.2 = 6.85 1201 Su p. 71
aI	4594	6.2	6.4	±	6.30 11	aI 3240	7.4	7.6 ± 7.50 11
aI	4316	6.2	6.2	0	6.20 00	aI 3207	6.4	6.4 0 6.40 00
aI	4308	6.4	6.4	0	6.40 00			
aI	13128	6.5	6.5	x	6.50 00			
aI	4283	6.3	6.3	x	6.30 00			
aI	3406	6.5	6.6	x	6.55 10			
aI	3397	6.4	6.5	1	6.45 01			
aI	13558	6.2	6.2	0	6.20 00			
aI	3378	6.3	6.4	x	6.35 10			
aI	3375	6.7	6.7	x	6.70 00			
aI	3324	6.3	6.1	x	6.20 11			

11.21 Lo.

8-12 21 ± 0.10

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2.56 Tuesday, Jan. 4, 1916

RZ Cars.

aI	3178	7.1	7.0	× 705 10	aI	2247	6.3	6.5 × 640 11
					BI	2228	6.4	6.4 p 640 00
aI	11817	6.2	6.2	0 620 00				
					aI	2210	6.5	6.3 × 640 11
aI	3146	6.5	6.4	1 645 10				
					aI	2148	6.3	6.4 × 635 10
aI	3667	6.6	6.5	1 655 01				
					aI	1808	6.7	6.4 3 660 12 ± 10 See p. 71
aI	3640	~~7.0~~	6.4	643 010				
	7.0 certainly wrong. reject. See p. 71				aI	2118	7.1	7.3 × 720 11
aI	3543	6.5	6.4	× 645 10				
					aI	2076	6.3	6.4 × 635 10
aI	3489	6.5	6.4	× 645 10				
					aI	2062	6.3	6.3 p 630 00
aI	1837	6.4	6.4	p 640 00				
					aI	2046	6.5	6.4 × 645 10
aI	3468	6.4	6.2	× 630 11				
					aI	2016	8.0	7.9 × 795 01
aI	3446	6.4	6.2	× 630 11				
					aI	1967	7.8	8.0 × 790 11
aI	3994	7.4	7.4	p 740 00				
					aI	1947	6.3	6.3 p 630 00
aI	2859	8.0	7.9	× 795 01				
					aI	3052	6.3	6.3 p 630 00
aI	795	7.0	7.0	p 700 00				
					aI	2984	6.3	6.4 × 635 10
aI	2814	6.3	6.4	× 635 10				
					aI	2942	6.2	6.3 1 Lo 625 01
aI	2628	7.6	7.5	× 755 02 15-11 6.9 ± 0.2				

3.04 Tuesday, Jan. 4, 1916

(cont.)

aI	1829	6.4	6.4	p 640 00	aI	875	6.5	6.4 × 645 10
	~~1646'~~							
aI	1469	6.4	6.2	× 630 11	aI	966	8.1	8.0 × 805 10
					aI	1904	7.5	7.6 × 755 10
aI	979	7.2	7.4	× 730 11				
					aI	1868	8.2	8.0 × 810 11
aI	632	6.5	6.5	p 650 00				
					aI	1609	8.0	8.0 p 800 00
aI	625	6.2	6.4	× 630 11				
					aI	1360	7.5	7.7 × 760 11
aI	616	6.6	6.5	× 655 01				
					Repeated Measures			
aI	537	6.5	6.4	× 645 10				
					aI	3289	7.4	7.4
aI	532	6.1	6.3	× 620 11	Retain all four observations			
					aI	10340	6.4	6.3
aI	1987	6.4	6.2	× 630 11	Retain all four observations			
					aI	3640	6.5	6.4
aI	438	7.7	7.7	p 770 00	Reject 8Bv. 7.0			
					aI	1808	6.7	6.6
aI	321	7.1	7.1	p 710 00	Retain all four observations			
								3.38
aI	99	6.5	6.3	× 640 11				Lo.
aI	4530	6.4	6.4	0 640 00				
aI	637	7.5	7.6	1 755 10				
					12-10 30 ± 10		25-33 70 ± 098	

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3.58
3.44

Tuesday, Jan. 4, 1916

RZ Cariopeiae

ac	7115	6.3	6.5	6.40 ∠1	ac	5169	6.2	6.4	6.30 ∠11
ac	7887	6.4	6.4	6.40 00	ac	7984	6.5	6.5	6.50 00
ac	6623	6.7	6.6	6.65 10	ac	5119	Too diff.		
ac	6569	6.6	6.5	6.55 01	ac	4806	Too diff.		
ac	6523	7.0	7.1	7.05 01	ac	4275	Too diff.		
ac	6255	7.1	7.1	7.10 00	ac	4261	Too diff.		
ac	6000	6.5	6.4	6.45 10	ac	3396	7.5	7.8	7.65 ∠2
ac	5906	Too diff.			ac	8689	Too diff		
ac	5812	7.9	7.9	7.90 00	ac	3336	8.0	8.0	8.00 00
ac	7777	6.5	6.5	6.50 00	ac	3241	6.5	6.5	6.50 00
ac	5497	7.7	7.8	7.75 ∠0	ac	2878	Too diff		
ac	5437	6.5	6.5	6.50 00	ac	2810	Too diff.		
	7827	Too diff			ac	8785	6.5	6.5	6.50 00
	5238	Too diff			ac	2742	Too diff.		Lo.
	5175	Too diff							

Tuesday, Jan. 4, 1916

RZ Cars. (cont)

ac	2718	6.4	6.3	6.35 01
ac	2095	7.8	7.8	7.80 00
ac	1866	7.3	7.5	7.40 ∠1
ac	1751	Too diff.		
ac	~~1005~~ 1053	Too diff		
ac	958	Too diff		
ac	76	Too diff.		
ac	810	Too diff.		
ac	223	Too diff		
	Repeated Obs.			
ac	3396	7.5		

Reject first obs. 7.8; certainly wrong.

4.06
~~4.0~~
3.55

Lo.

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Wednesday January 5, 1916

I Ursae Majoris
Discordant Measures Looked up

AC 2383
n.s. ? < 11.0 e
Orig. est. Bonn 6 p. 117 12.14? Rejct. Too faint for
Measuration.

AC 2394
11.3? ef
Orig. est. Bonn 6, p. 1115 11.28. Return with ?
Adopt 11.28? ef

Friday January 7, 1916

1 25 I Ursae Majoris
Discordant Measures Comb.

AC 3715
Too poor

AC 3610
Too poor

AC 3756
Too poor

Rejct all three of the above plates
without remarks,

1 27

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Wednesday January 12, 1916

4 05 R Cassiopeiae Cont. from page 73

D 19505 pr	6.4	6.5	6.45
5146 pr	6.5	6.6	6.55
5018 pr	6.4	6.4	6.40
18507 pr	8.1	7.9	8.00
5391 pr	6.5	6.6	6.55
16590 pr	7.8	7.8	7.80
23618 pr	6.3	6.2	6.25

Revised

D 5146 pr	6.6
5018 pr	6.4
5391 pr	6.6
16590 pr	7.8
18507 pr	7.9
19505 pr	6.5
23618 pr	6.2

4 17

D 23618 is comparison star plate on which variable is bright. Other plates were selected by Miss Leake, as showing variable faint.

Monday January 17, 1916

3 25 U Sagittae

Discordant Measures looked up

A D 2198

8.8 prev. meas. <9.6 reject

A D 7152

7.6 prev. meas. < 8.1, reject

AC 11717

8.1 prev. meas. 8.8, reject

3 30 A D 7988

8.0? Defective image?

Reject this plate. Image at limit of visibility. Observation very doubtful

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Wednesday January 19 1916

12. 35 22

065555 (R) Lyncis

Estimates of Magnitudes of Hagen Stars
on 4 pages print from D 16839 = MC 4 264
Current nos. marked in green ink.
Photographic mags. " 5 " red "
21 35

Star			Plate unmeasd		Diff.
1	fn	10.2 red glass	1	fn 10.0 eye	2
2	fn	11.2	2	11.4 eye	2
3		12.7	3	12.5 eye	2
4		11.8 eye	4	12.0 eye	2
5		11.7 eye	5	11.6 eye	1
6	fn	9.8 glass	6	fn 9.8 eye	0
7	fn	10.6 glass	7	fn 10.5 eye	1
8	fn	10.8 glass	8	fn 10.7 eye	1
9		veg 8.7	9	veg	.
10		veg 9.8	10	veg	.
11		12.9 eye	11	12.7 eye	2
12		11.8 eye	12	11.5 eye	3
13	fn	11.0 glass	13	10.7 eye	3
14		12.3 eye	14	12.1 eye	2
15		veg 11.7	15	veg	
Hagen stn? 16		13.7 eye Leave	16	13.6 eye	1
17		13.1 glass	17	13.1 eye	0
18		11.3 eye	18	11.6 eye	3
19		11.6 eye	19	11.7 eye	1
20		veg. 12.2	20	veg.	
21		13.0 eye	21	12.8 eye	2
22		veg. 13.4	22	veg.	
23		11.8 eye	23	11.7 eye	1

19-8
18

Wed Jan 19 1916

R Lyncis cont.

24	fn	10.9 glass	24	11.1 eye	2
25		13.3 glass	25	13.1 eye	2
26		veg. 11.1	26	veg	
27	fn	10.1 glass	27	fn 9.9	2
28		veg 6.8	28	veg	
29		veg. 10.6	29	veg	
30		veg. 13.0	30	veg	
31	fn	11.1	31	11.5	4
32		13.2 glass	32	13.2	0
33		13.1 glass	33	13.0	1
34		12.6 eye	34	12.5	1
35		12.5 eye	35	12.4	1
36		13.3 eye	36	13.4	1
37		veg. 12.6	37	veg	
38		13.3 eye	38	13.3	0
39		veg. 9.0	39	veg	
40		veg. 10.2	40	veg	
41		12.9	41	12.6	3
Double n. 42		14.0 glass	42	14.2	2
43		13.2 eye	43	13.2	0
44		13.3	44	13.2	1
45		12.7 eye	45	12.9	2
46		11.8 eye	46	12.0	2
47		13.0 eye	47	13.1	1
48		12.9 eye	48	13.0	1
49	fn	11.0 eye	49	10.9	1
50		12.3 eye	50	12.2	1

Conn

13-16
20

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Wed Jan. 19, 1916

R Lyncis cont.

Plate Rev.

51	fav	9.9	eye	
52	fav	10.3	eye	
53	fav	9.9	eye	
54	fav	10.7	eye	
55	fav	9.9	eye	
56	fav	10.8	eye	
57		neg	8.1	
58		Too near edge		

51	fav	10.1	2
52	fav	10.5	2
53	fav	10.0	1
54	fav	10.9	2
55	fav	10.0	1
56	fav	11.0	2
57		neg	

1 20
115m ont

4.5.6

Time 30m for 44 observations. Very trying to the eyes. Reading glass not satisfactory on account of reflections and difficulty of keeping the same focus. Estimates seem very unsatisfactory and much more difficult than estimations on an original plate.

Second set of measures with plate reversed. Reading glass not used. Many interruptions. Time about 30m. Plate 36 onward. Artificial light used.

+32 −33
44

Av Diff. ± 0.15 mags

-10
6

Thursday February 3, 1916

R Draconis. Dissordant Measures.

C 3441

Too poor. Many defects on plate; an object near position of variable is apparently a defect.

Reject without remark

D 15222

~~7~~ < 11.7 < 11.6

Variable seen but image is too faint and poor to make estimate of brightness

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Monday, Feb 7, 1916

11.55

		RW Tauri		035727		Magnitudes on Standard Scale		
								new. plate.
	ac 10806	8.6	8.5	8.55 0.1	ac 5653	7.9	8.0	7.95 1.0
	ac 10231	8.2	8.2?	8.20: 0.0	ac 3992	7.9	8.1	8.00 1.1
	ac 1011	8.3?	8.3?	8.30: 0.0	ac 3962	8.1	8.0	8.05 1.0
	ac 602	8.9i	88i	8.85 1.0	ac 2900	8.0	8.1	8.05 0.1
	ac 10081	11.6?	11.7?	F 11.65: 0.1	ac 4443 00.	8.0		
2 fm p 84	ac 10173	9.5	9.35 12 ~~92~~ 9.2		ac 2367	8.9	8.9	8.90 0.0
	ac 5625	8.0?	8.1	8.05: 0.1	ac 2344	8.1	8.0	8.05 1.0
	ac 9375	8.8	8.9	8.85 0.1	ac 2227	J.P.	J.P.	
	ac 5966	10.2?	100g	10.10: 1.1	ac 1997	8.1	8.3	8.20 1.1
	ac 4239	F < 11.8	F 11.6	11.70: 1.1	ac 3275	8.2	8.1?	p 8.15: 0.1
	ac 5387	8.0	8.0	8.00 0.0	ac 1296	8.0	8.1	8.05 0.1
	ac 5183	9.2	9.2	9.20 0.0	ac 1076	10.5	10.6?	p 10.55: 1.0
	ac 4728	11.6?	11.6	11.60: 0.0	ac 6090	8.0	8.0	8.00 0.0
	ac 4698	8.1	8.1	8.10 0.0	ac 769	8.0 gi	8.1 p.	8.05 0.1

Lo.

Monday, Feb 7, 1916

		RW Tauri		new. plate				new. plate
	ac 604	8.7	8.9i	8.80 1.1	ac 15832 Doo.	8.0?		
	7924	8.1	8.1	8.10 0.0	1128	8.4?	8.2?	8.30: 1.1
	12172	8.0	8.0	8.00 0.0	11221	9.8	9.7 g	9.75 0.1
2 fm p 84	15806	m ≤ 11.7	m ≤ 11.6	11.65 1.0	6785	8.0	8.0	8.00 0.0
	15742	8.7	8.6	8.65 1.0	11115	8.0	7.9	7.95 0.1
	15673 Doo.	8.0			10931	10.5	10.5	10.50 0.0
	15667 Doo.	8.0			12867	7.9	8.0	7.95 1.0
	603	9.0g	9.0g	9.00 0.0	13761	10.5	10.4	10.45 1.0
	121	8.2	8.4	8.30 1.1	2832	8.0	8.1	8.05 0.1
	5491	8.0	8.0	8.00 0.0	13481	8.0	8.2	8.12 1.1
	15985	8.4?	8.3	8.35: 0.1	13422	12.0?	12.0?	12.00: 0.0
	17075	11.4	11.6	11.50 1.1	p 84 13366	~~8.7~~	8.4	
	16845	8.9	8.8	8.85 1.0	12689	m ≤ 11.7	m ≤ 11.6	11.65 1.0
	15843 Doo.	8.8			12029	8.4	8.5	8.45 0.1
					11257	9.7	9.8	9.75 1.0 Lo.

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Monday, Feb. 7, 1916

	RW Tauri	rev. plate			
mc	6503 p.c. 10.5	p.c. 10.5	1050	00	
D	20197 P.C. 8.0	p.c. 8.0 q.	800	00	
Second Meas.	10173 9.2	9.2	920	00	
2d m	15806 <11.6	F <11.6	<1160	00	
2d meas.	13366 8.4	8.5	845	01	

12
X. 45

Lo.

Thursday, February 10, 1916

Examination of Plates for Yellow Red Stars
Region 6h, +30°
AC 13890 (yellow) compared on AC 10832 (blue)
On these two plates many stars appear of nearly the same brightness, assumed to be near Class K. Many are much fainter on the yellow plate, and are assumed to be near Class A. A few are distinctly brighter on the yellow plate, and are probably interesting objects. No careful examination made but a few objects numbered below are marked on AC 13890

Dm	No.	R.A. h	m	Dec. 1900 °	′	Sp. Ms	Sp. Sc.	Var.
+37° 1175	1	5	17.9	+37	17	K	K0-5	
+37° 1336	2	5	44.2	+37	16	Ma	K2	
+45° 1217	3	5	52.5	+45	56	Ma	Ma	
+30° 1232	4	6	21.2	+30	43	·	K0	
+44° 1518	5	6	35.8	+44	38	K	K5, perhaps Ma	
+43° 1575	6	6	39.5	+43	41	5	K0	
+22° 1241	7	6	8.8	+22	32	Ma	Ma	? dem.

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Tuesday, February 15, 1916

Measurements of Diameter to determine Elongation - On Discordant Series Plates.

Scale engraved with 2 inch mid Lines.

Magn. from Plate Curve			MC 4835 Direct	MC 4835 Perp. to Ip	C 12 Direct	C 12 Perp. to Ip	(1) Mean n.s.	(2) e.w.	2/1	(1)×(2)	√12	Mean	2-1
10.21	10.19	13	108	122	139	153	115 1,7	146 1,7	1.27	16790	1.29	130	31
11.30	11.50	17	91	90	117	116	90 1,0	116 1,1	1.29	10440	1.01	103	26
12.12	12.12	19	72	75	97	105 97	74 2,1	101 4,4	1.36	7474	.86	88	27
12.46	12.76	22	60	62	96	97	61 1,1	96 0,1	1.61	5856	.77	78	35
13.60	13.58	24	57	57	65	72	57 0,0	68 3,4	1.19	3876	.62	62	11
14.60?	14.76	27	41	42	487	45	42 1,0	46 2,1	1.10	1932	.44	44	4
													10 2 6 17 19 30
							439 6	573	78 8 6				
							73	96	1.30	elongated			

D = +0.036mm + 0.0014R

Angle = 3°.75

MC 4834 Pole

13	142	122	127	123	13 2 10 10 8 7	125 2,2	0.95	16500	128	128	-7
16	103	103	100	104	10 3 0 0 7 2 6 1 1	102 2,2	1.00	10503	102	102	-1
18	85	87	90	92	88 3 1 2	91 1,1	1.06	7826	88	88	5
20	76	83	73	87	80 4 3 74 3 1 1	80 1,7	1.00	6400	80	80	0
23	70	73	63	63	72 2 66 4, 3	63 0,0	0.87	4536	67	68	-9
25	52	57	60	56	4 5 4,4	58 2,2	1.08	3132	56	56	4
27	43	43	44	47	43 0 0	46 2,1	1.07	1978	44	44	3
							570 7 81	565 7 81	703 7 1.00	circular		

The above measures were made with the scale for diameters, engraved last summer in N. & S. with North at Ip, then with East edge at Ip. Elongation values for MC 4835; the maximum being thrown near V = 60 - may not be significant from 80 to 120 probably best range of diameters with inclined Lines

Tuesday, February 15, 1916

Diameters Cont.

MC 6286 C 12 Measures

	n Ip	p Ip	n Cp	p Cp	(1) n.s.	(2) e.w.	2-1	2/1	Mean 1,2	Magn. (Plate Curve)	Hel 70,4
18	89	93	124	122	91 2 2	123 1 1	32	1.35	107	11.30	11.30
20	78	70	124	120	74 4 4	122 2 2	48	1.65	98	11.61	11.90
22	72	63	97	150	68 4 5	98 1 2	30	1.44	83	12.25	12.76
24	62	5 6 2	76	87	57 5 5	82 6 5	25	1.44	70	13.05	13.44
26	60	52	70	82	56 4 4	76 6 6	20	1.36	66	13.37	13.65
16	115	113	152	143	114 1 1	148 6 5	34	1.32	131	10.40	10.38
					460 6	649 6	189 6	256			
					477	108	32	1.43			

MC 6288 Pole

13	152	120	130	130	141 36 16 16	130 00	0.96	133		
16	111	100	103	104	106 45 46	104 1 0	099	105		
18	95	83	83	87	89 06 06	85 2 2	0.96	87		
20	79	77	74	69	78 1 1	72 3 3	0.93	75		
25	60	66	52	53	63 3 3	52 0 1	0.82	58		
					472 5 94	443 5 89	446 5 093			

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Tues. Feb 15, 1916

Dramichus cont.

		MC 3758		C 12		Means				Mean	Mags. (Harlow)
		n + S		e and W		n + S	e + W	2/1			2.1
		N ~~and S~~ P		~~E and W~~ X P							
10.65	17	100	98	132	128	99 1	130 2	1.3	114	10.40	31
11.30	18	86	81	117	109	84 2	113 4	1.4	98	11.31	24
	20	72	73	92	98	72 0	95 3	1.3	84	12.15	23
	22	55	58	85	83	56 1	84 1	1.5	70	12.97	28
	24	52	53	76	77	52 0	76 0	1.5	64	13.29	24
						363	498	~~24~~ 25			35
						5	5	5			5
						73	~~99~~ 100	1.40 (1.37)			27

MC 3755 Pole

	N	P	N	P					
13	124	111	112	120	118 6	116 4	0.9	117	
16	104	100	97	99	102 2	98 1	0.9	100	
18	83	78	87	89	80 3	88 1	1.1	84	
20	76	68	81	70	72 4	76 5	1.1	74	
25	57	51	53	51	54 3	52 1	1.0	53	
					426	430			
					5				
					85	86	1.00		

Tues. Feb. 15, 1916

Dramichus Cont.

	MC 2876		C 7		Means			Mean	Mags.	2-1
	n and S		e and W		n + S	e + W	R			
	N	P	N	P						
15	90	~~78~~ 83	113	122	86 4 3	122 118 10 5 4	14	104	10 8 30	36
17	~~78~~ 82	73	122	114	78 4 5	118 4 4	1.5	98	10.53	40
19	68	66	116	109	67 1	112 4 3	1.7	90	10.97	45
20	66	70	75	90	68 2 2	82 7 8	1.2	75	11.67	14
22	57	54	76	78	56 1 2	77 1 1	1.4	66	12.10	21
					355	511	22			156
					5					5
					71	102	1.44			31

MC 2877 Pole

13	105	102	94	103	104 1 2	98 4 5	0.9	101
16	86	89	75	81	88 2 1	78 3 3	0.9	83
18	68	63	70	64	66 2 3	67 3 3	1.0	66
20	53	53	52	56	53 0 0	54 2 2	1.0	54
25	40	42	47	44	41 1 1	46 1 2	1.1	44
11	130	115	122	118	122 8 7	120 2 2	1.0	121
					474	463	59	
					6			
					79	77	0.97	

Mean Ratio for the 4 plates on the C Region, 1.39

A difference of 10 in reading corresponds to a difference of 0.014 mm. Therefore a difference of 30 corresponds to 0.042 mm. On the 4 plates measured pp 86 to 89, the difference between horizontal and vertical readings is about a micron. 5 2 mic

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Friday, February 18, 1916

1 00 R.W. Jauncey Cont. from page 84

Obs. by Anglander's Method on plates also included in Y.C. 104

Order of Comp. Stars a, c, f, c', d, e, f, g, g', k, l, m, t, o, n, n', p, q, r, s, t

AC 5491

a 6 V	7.90	7.92	02	01
V 1 C	7.93			

AC 5133

e 1 V	9.18	9.10	08	09
V 3 f	9.01			

AC 5966

g' 4 V	10.08	10.12	04	04
V 3 K	10.16			

Very poor images q

AC 6602

8.7 d 3 V	9.08	8.83	25, 25	proportional, 8.89
V 5 f	8.58			

trails i

AC 4728

0 1 V	11.76	11.62	06	06
V 1 n	11.56			

7

AC 4239

0 3 V?	11.88?	11.77?	11	11
V 0 n?	11.66?			

7

Friday, Feb. 18, 1916

R.W. Jauncey Cont.

AC 603

d 2 V	8.98	8.73	25, 25	proportional, 8.86
V 6 e	8.48			

i

AC 1076

K 3 V	10.64	10.62	02, 02	
V 4 m	10.60			

~~V 2 b'~~

~~b' mounted~~

AC 604

C' 3 V	8.83	8.76	07, 07	
V 1 d	8.68			

AC 2900

a 8 V	8.10	8.06	04, 05, 01	
V 0 C	8.03			
V 3 b	8.05			

AC 2367

1 20 d 1 V 8.88 8.83 05, 05

V 3 e 8.78

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Friday, Feb. 18, 1916

3 10 RR Tauri Cont.
Plate Removed

AC2900
a 6 V 7.90 8.03 13 00 12
V 0 C 8.03
V 2 K 8.15
prop. a 10 K, t-0 C 8.03 8.03

AC604
prop. c.9 d 8.74
arg c 3 V 8.83 8.83 07, 02, 08
V 0 d 8.78 8.78
V K 4 e 8.68 8.68

AC1076
prop. K.3 m 10.52
arg K 3 V, 10.64 10.57 07, 07
V 5 m 10.50

AC603
prop. d.2 e 8.84
d 1 V 8.88 8.83 05, 05
V 3 e 8.78

AC4239
m.8 p ? 7 12.18
m 1 V 11.76 11.94 18 17
V a p ? 12.11

Friday, Feb. 18, 1916.

RR Tauri Cont

AC4728
0.2 m 11.60
p 3 V 11.36 11.47 09 11 01
V 0 0 11.58 41
V 2 m 11.46

AC602
d 7 e 8.99
d 4 V 9.18 8.98 20, 20
V 3 e 8.78

AC5966
g.8 K 10.21
g 3 V 9.98 10.12 13, 13
V 1 K 10.24

AC5133
e.1 f 9.10
d 4 V 9.18 9.09 09, 01, 08
V 0 e 9.08
V 3 f 9.01

AC5491
a.9 C 8.96
a 6 V 7.90 7.92 02, 01
V 1 C 7.93

AC2367
d 2 V 8.98 8.98 00, 00
V 1 e 8.98

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Saturday ~~Sunday~~ Feb. 21, 1916

11.30

H.S. Lo's Variable +17°736

Nov. 12 1914	ac 15714	11.5	
Oct. 30, 1914	ac 15674 y	11.0?f	
Oct. 2, 1914	ac 15567	<10.8	
Sept. 22, 1914	ac 15532	11.5?f	
Oct. 13, 1914	ac 15613	J.P	
Nov. 11, 1914	ac 15708 y	J.P.	
Nov. 16, 1914	ac 15732	11.1	
	~~15741~~		
Nov. 21, 1914	ac 15759	10.9	
Nov. 27, 1914	ac 15796	11.4	
Dec 10, 1914	ac 15826	J.P.	
Dec 11, 1914	ac 15833 y	J.P	
Dec 16, 1914	ac 15875	11.4	
Dec 17, 1914	ac 15885	11.0	
Dec. 18, 1914	ac 15898	11.3	

Estimates - Arbitrary scale

ac 15916	10.9	Dec. 22, 1914
ac 15936	n.s<11.3	Dec. 26, 1914
ac 15986	n.s<11.8	Jan 8, 1915
ac 16018	11.5	Jan. 13, 1915
ac 16032	11.4	Jan 20, 1915
ac 16110	10.8	Feb. 17, 1915
~~16112~~		
~~16121~~		
ac 14615	n.s<11.8	Dec 3, 1913
ac 14624	J.P	Dec. 5, 1913
ac 14629	11.3	Dec 8, 1913
ac 14715	11.3	Dec. 28, 1913
ac 14726	11.6	~~Jan.~~ Dec. 29, 1913
ac 14741	11.6?f	Jan 5, 1914
ac 14766	J.P.	

Lo

~~Friday~~ Feb. 26, 1916.

H.S. Lo's Variable (cont.)

Jan. 18, 1914	ac 14791	11.0?f	
Jan. 22, 1914	ac 14799	11.2	
Feb. 13, 1914	ac 14882	11.3	
Feb. 24, 1914	ac 14902	11.2	
Feb 27, 1914	ac 14919	J.P.	
Dec. 30, 1912	ac 13609	J.P	
~~ac~~			
Feb. 17, 1915	ac 16110	10.8	
Jan 1, 1913	ac 13614	J.P	
Jan 14, 1913	ac 13648	11.5?f	
Jan. 28, 1913	ac 13689	J.P	
Jan. 20, 1915	ac 16032	11.3	
Feb. 6, 1913	ac 13741	J.P	
Feb. 8, 1913	ac 13752	11.6?	
Feb. 12, 1913	ac 13767	J.P	

Period short - Perhaps B type Zeppa

ac 14418	J.P	Sept. 29, 1913
ac 14505	n.s. < 11.8	Nov. 4, 1913
ac 14524	11.3	Nov. 6, 1913
ac 14572	11.2?p.	Nov. 20, 1913
ac 14587	J.P.	Nov. 22, 1913
mc 9366	13.0	Oct. 11, 1915
mc 7836	11.3	Feb 17, 1915
mc 7125	11.2	Dec. 10, 1914
mc 8075	10.8	March 4, 1915
ac 15602	11.4f	Oct. 11, 1914
mc 7814	def. 11.4?	Feb. 13, 1915

I 13116	Oct. 8, 1896	13.8	11.~~45~~ 50
ac 16757	Off edge		Sept. 24, 1915
16824	12.0? f		Oct. 9, 1915
16856	11.8? f		Oct. 17, 1915
17068	n.s. < 11.5		Dec. 3, 1915
17079	H.3		Dec. 1915

Lo

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F Saturday, Feb 26, 1916

J Bosler

Examination of Discordant Plates

C 9099
13.2
Previous estimate 13.15 Retain.
I 26992
14.9? f

Estimates of on scale of standard magnitudes adopted February, 1916

Wednesday, March 8, 1916

Thursday, March, 9, 1916

11.15
3.25

RW Sawi

ac	2397	10.5	10.6 ✓	am	223	ns ~~10.3~~	n.s. < 10.5	✓
ac	5832	F < 11.0	n.s? < 11.0 ✓	am	3148	n.s ~~11.0~~	n.s < 10.5 p	✓
ac	5748	7.9	8.1 ✓	am	2348	8.9	8.9	✓
ac	5526	n.s. < 10.5	n.s? < 10.5 ✓	am	1610	9.4	9.4	
ac	4597	~~9.9~~	U P ✓	am	337 320.	8.8	8.8	✓
ac	4131	8.0	8.2 ✓	am	222	10.4	10.5? f	✓
ac	4106	~~10.5?~~	n.s? < 10.5 ✓ q 2	ac	3089	10.9	11.0 f	✓
ac	2958	8.6	8.4 ✓	ac	6034	9.9	10.0? f. p.	✓
ac	2002	8.6	8.5 ✓	ac	5598	10.4	10.4	✓
ac	4374	11.5	11.6? f ✓	ac	5527	10.9	10.9 f	✓
ac	3319	9.3	9.3 ✓	ac	4442	11.0	10.9? f	✓
ac	1733	8.6	8.6 ✓	ac	4348	8.1	8.2	✓
am	3248	ns < 10.0	n.s < 10.0 ✓	ac	3129	8.9	9.0	✓
am	3228	n.s < 10.3	n.s < 10.3 ✓	ac	5525	9.4	9.4	✓
am	2326	8.8	8.8 ✓				Lo.	

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Wednesday, March 8, 1916
Thursday, March 9, 1916

RW Tauri (cont.)

ac	5597	8.9	8.9 rev. plate	✓	♀	33341	9.2	9.3 rev. plate ✓
ac	3435	8.0	8.0	✓	♀	33340	11.9 6	11.5 ✓
ac	2913	n.s<10.5	n.s<10.5	✓	♀	33339	12.1	12.3 ✓
ac	2135	8.0	8.3	✓	♀	33338	12.2	12.2 ✓
ac	1312	J.P.	J.P.	✓	♀	33337	10.9	~~11~~ 11.2 ✓
ac	107	J.P.	J.P.	✓	♀	33316	off edge	✓
ac	1972	8.2	8.4	✓	♀	33322	88 B	8.9 ✓
ac	1817	8.6	8.6	✓	♀	33323	J.P.	J.P. ✓
ac	1302	8.1	8.0	✓	♀	33319	wrong region	✓
ac	1258	11.6	11.7?f	✓	♀	33318 p.c.	8.3?	p.c. 8.0 ✓
ac	2802	8.3	8.4	✓	♀	33292	J.P.	J.P. ✓
ac	442	8.0	8.2	✓	♀	33291 p.c.	8.0	p.c. 7.9 ✓
♀	33343 p.c.	8.4?	p.c. 8.4	✓	♀	33290	J.P.	8.7 ✓
♀	33342 p.c.	8.6	p.c. 8.5	✓	♀	33289	9.7	9.8 ✓

L0

RW Tauri (cont.)

♀	21692	Sp.	rev. p		♀	3080	J.P.	rev. plate J.P. ✓
♀	33208	8.5	8.5	✓	♀	3084	9.5	9.5 ✓
♀	33209	8.9	8.9?	✓	♀	3085	9.3	9.4 ✓
♀	33210	9.3	9.3	✓	~~X~~B 248		n.s<11.0	n.s<11.2 ✓
♀	33175	J.P.	n.s<9.7	✓	~~B 1021~~			
♀	33176	J.P.	J.P.	✓	B 1033		B	B ✓
♀	33177	~~n.s<11.~~ 11.8?f	11.8?f	✓	B 3159		12.3f	12.4? ✓
♀	33178	n.s ~~<10.2~~	n.s<11.0	✓	AC 5514		8.8	8.9 ✓
♀	33211	9.5	9.6	✓				
♀	32786 p.c.	8.0	p.c. 8.1	✓				
♀	26468	9.5f	9.6?	✓				
♀	33212	J.P.	J.P.	✓				
♀	24161 p.c.	8.7	p.c. 9.1 night plate Taupoor	p.c. ✓				
♀	1948	Sp		✓				

11.55
4.00

L0

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Wednesday, March 8, 1916

~~Thursday~~

R

RW Tauri Cont

AC 6024 too faint ✓

B 1021 Several images ✓
Too poor

I 32787 ✓
Too poor

AC 1039 ✓
Too poor

Thursday, March, 9, 1916

11.57

RW Tauri (cont.)

				new plate	
C 15858			6 n.s		
1 9.3	9.3 ✓		7 ?		
2 9.5	9.4 ✓		8 12.4? f		✓
3 9.6?	9.7? ✓		9 12.4? f		✓
4 9.8?	9.9 ✓				
5 10.3? f	10.2		C 15859		
C 15996			1. 10.6?	1. 10.6?	✓
1 9.4?	9.5?		2. 10.9	2. 10.9?	✓
C 15857			C 15860		✓
1 8.5	8.4 ✓		1 n.s		✓
2 8.5	8.4 ✓		2. n.s		✓
3 8.6?	8.4 ✓				
4 8.6	8.5 ✓		C 15891 images not identified		✓
5 8.7	8.5 ✓				
6 8.7	8.9 ✓				
7 9.1?	9.0? ✓		C 15922 J.P		✓
8 9.0	9.1? ✓				
9 9.3	9.0 ✓				
10 9.4	9.3 ✓		C 15964 J.P		
11 9.5	9.3 ✓	n	1		
12 9.4	9.4		2		
			3		
C 15830			4		
1 no image			5		
2 n.s.			6		
3 n.s			7		
4 n.s		s	8		
5 n.s				Lo.	

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Thursday, March 9, 1916

RW Tauri

		new plate
C 15993		
1	m.s <11.7	f <11.3 ✓
C 15994		
1	10.9?	10.8? ✓
C 15995		
1	10.1?	10.0? ✓
C 15997		
1	9.3?	9.3? B ✓
C 15998		
1	B	9.2? ✓

20 12.30

Friday, March 24, 1916

4 55 S W Cygni. Observations of Saint Louis on C plates for E. S. K.,

Mar. 30, 1916 Kate Rex.

	Sec	Magn			
C 12007	~~9~~	13.2	9	~~12.8~~ 13.0	13.00 2.2.0
	11	13.0	11	~~13.0~~ 13.0	13.00 0.0.0
	12	13.1	12	~~12.8~~ 13.0	12.97 1.2.0
C 12008	2	12.9	2	13.0	12.95 01
	3	12.8	3	13.0	12.95 01
C 12009	2	12.7	2	12.7	12.70 00
	4	12.7	4	12.6	12.65 10
	5	12.6	5	12.7	12.65 01
	7	12.5	7	12.6 12.5	12.50 00
C 12043	5	12.8	5	12.8	12.80 00
	6	12.7	6	12.7	12.70 00
	7	12.8	7	12.7	12.75 01
	8	13.1	8	12.9	13.00 12
	9	12.9	9	13.0	12.95 10
	10	12.8	10	12.7	12.75 01
	11	13.0	11	13.1?	13.05? 01
	12	12.9	12	12.9	12.90 00
C 12158	10	Too faint and poor			
C 12159	2	12.7	2	12.6	12.65 10
	3	12.8	3	12.9	12.85 01
	4	12.7	4	12.7	12.70 00
	5	12.9?	5	12.7	12.80? 12
	7	12.9?	7	12.8	12.85? 10

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Friday, March 24, 1916

SW Cygni Cont.

			March 29, 1916 Plate Reviewed		
	2m.	Magn.			
C 12181	13	12.9?	13	Tropoo	12.9? a=
C 12182	2	12.8?	2	12.8	12.80? 00
	4	12.9	4	12.9	12.90 00
	6	13.1	6	12.9	13.00 1L
	7	12.8	7	12.8	12.80 00
	8	13.0?	8	12.8	12.90? 1L
	9	13.0?	9	12.9?	12.95? 0L
Measures very uncertain. Images very faint					
C 12287	11	12.7	11	12.9	12.80 1L
C 12707	7	13.1	7	13.1	13.10 00
	9	13.1	9	13.1	13.10 00
C 12773	4	12.9	4	12.8	12.85 10
	5	12.7	5	12.7	12.70 00
	6	12.6	6	12.6	12.60 00
555					
C 12929	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				

Saturday, March 25, 1916

11 00 SW Cygni Cont.

			March 29, 1916 Plate reviewed		
	2m.	Magn.			
C 12929	3	13.0?	3	13.1?	13.05? 0L
	4	12.9	4	12.7	12.80 1L
	5	13.0	5	12.9	12.95 0L
	6	12.7	6	12.8	12.75 1 0
	7	12.8	7	12.9	12.85 01
	8	13.1	8	12.8	12.95 1L
	9	13.0	9	12.9	12.95 0L
	10	12.9	10	12.9	12.90 00
	11	12.9?	11	13.0?	12.95? 1 0
C 12241	3	12.9	3	12.9	12.90 00
	4	13.1	4	~~13.0~~ 12.8	12.95 1L
	5	12.8	5	12.7	12.75 0L
	6	12.6	6	12.7	12.65 01
	8	12.6	8	12.7	12.65 01
	10	12.8	10	12.8	12.80 00
C 13578	2	12.9	2	12.9	12.90 00
	3	12.9	3	12.9	12.90 00
	4	13.0	4	13.1	13.05 01
	5	13.0	5	13.0	13.00 00
C 13638	2	13.2	2	13.0	13.10 1L
	3	13.0	3	13.2	13.10 1 1
	4	12.9	4	13.0	12.95 1 0
	5	12.9	5	12.9	12.90 00

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Saturday, March 25, 1916

S N Cygni Cont.

					March 29, 1915 Plate revised	
C 14074	7	12.9	7	13.2	13.05	12
	8	13.2	8	13.1	13.15	02
	9	13.1	9	13.1	13.10	00
	10	13.1	10	13.2	13.15	10
	11	13.2	11	13.1	13.15	02

11 25

Thursday March 30, 1915

C 13969	2	13.0	2	13.1	13.05	01
	3	13.1	3	13.1	13.10	00
	4	dif.	4	Lif.	g	
	5	13.2	5	13.3	13.25	01
	6	13.2	6	13.2	13.20	00
	7	13.1	7	13.2	13.15	10
	8	13.2	8	13.2	13.20	00
	9	13.3	9	13.3	13.30	00
	11	13.2	11	13.2	13.20	00
	12	13.3	12	13.3	13.30	00

Tuesday March 28, 1916

A Cassiopeiae. Examination of Dissordant Plates.

aC2077 11.9 ? f

aC3887 f ? < 11.2

aC2221 to be from. Reject

aC1689 to be from. Reject

aC2094 to be from. Reject

aC3791 f < 11.0

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Thursday, March 30, 1916

I Ursae Majoris

Examination of
Plate AC 15735, J.D. 2045382, giving
a large residual in Table III of H & Ro, I.

Examination of this plate shows that
the variable is extremely faint and the
image appears to be defective. It is
quite unsafe to make an observation.
Reject from proof D.

Thursday, April 20, 1916

R J Lacertae.
Estimates of Comparison Star g^2 in terms
of Sequence for RZ Cygni

D 28939
11.32 g 4 g^2 11.72 11.72 00 01
g^2 2 h 11.93 11.73

D 28860
g 3 g^2 11.62 11.68 06 05
g^2 2 h 11.73

MC 6415
g 3 g^2 11.62
g^2 2 h 11.73 11.68 06 05

D 18560
Too near edge

AC 7906
g 4 g^2 11.72 11.~~72~~ 68 04 05
g^2 3 h 11.63 ~~11.63~~

AC 14620
g 4 g^2
2 2 3 h

Magnitudes in Series Bdk 9a page 50 (RZ Cygni)
used for reduction

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Thursday, April 20, 1916

R J Lacuta Cont.

Examination of Quality and distances of Images.

I 28309

Stars e', f', g', and h' are much poorer than corresponding stars e, f, g, h, k with which they are compared. Star e 35 m.m. from center; e' 40 m.m. Images rapidly deteriorate after distance 35 m.m. Stars k' and l' are fairly comparable with d, k, l

I 28860

The distances and qualities resemble those on I 28309

AC 14620

Images of two sequences resemble each other

AC 7906

Images resemble each other.

Evidently, for stars c', e', f', g' and h' it will be safe only to use crowd plates, primaries comparisons and AC plates. For stars d', k' and l' I plates also may be used.

Thursday, April 20, 1916

R J Lacuta Cont.

Estimates of Comparison Stars in Zones I Dec. for H 3 Cygni To take place of measures on I plates, found subject to large corr. for dist.

							Prop. Red.
f 9.42	AC 7906						
c 9.94	c 1 c' 2 d	10.04,	10.32	10.18	14	14	10.13
d 10.52	c 2 d' 1 d	10.14	10.42	10.28	14	14	10.33
e 10.47	d 1 e' 1 e	10.62	10.37	10.50	12	13	10.50
f 1069	e 4 f' 1 f	10.87	10.59	10.73	14	14	10.65
g 11.32	g 1 g' 7 h	11.42	11.23	11.32	10	11	11.40 / 11.35
h 11.93	g 7 h' 1 h	~~12.03~~ 12.02	11.83	10.92	10	11	11.85
K 12.14	g 4 g'' 4 h	11.72	11.53	11.62	10	11	11.62
	g 7 K' 1 h	1202	10.83	1092	10	11	11.85
	Test k 1 l' 1 K	1203	12.04	1204	01	01	12.04
	AC 14620						
	f 8 c' 1 c	10.22	9.84	10.03	19	19	9.88
	d' 0 c 4 e	~~10.52~~ 9.94	10.07	10.00	06	07	10.00
	c 3 e' 1 e	10.24	10.37	10.30	06	07	10.34
	e 3 f' 1 f	10.77	10.59	10.68	09	09	10.63
	f 1 g' 1 g	10.79	11.22	11.00	21	21	10.99
	g 6 h' 1 h	11.92	11.83	11.88	04	05	11.84
	g 4 g'' 3 h	11.72	11.63	11.68	04	05	11.66
	g 6 K' 2 h	11.92	11.73	11.82	10	09	11.78
	l' 6 f						

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Wednesday, May 17, 1916

δ Cephei Estimate of Magnitude

MC 10740 Yellow. May 11, 1916

8.73 d 4 V	9.13	9.13, 892	9.02	11, 10–	
8.42 V 2 R	9.12	904	908 8.84	8.96	12, 12

MC 10741 Blue May 11, 1916

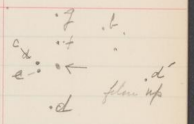
1371 q 6 V	1431	24
V 0 R 14.56	14.56	01
V 2 R 1498	1478	23
	165 / 3	
	14.55	

Color Index = 14.55 – 8.99 = 5.56

191033 R Y Sagittarii

Marked on B 26146, am 10905

Sequence selected previously for this examination.



19h, -38°	am 11317	Oct. 5, 1915	a 2 V 3 b		
20h, -15°	11329	Oct 6, 1915	V 2 b	extreme edge	
19 -15	AC 16837	Oct 3, 1915		Off edge	
	am 5637	July 6, 1908	a 3 V 3 b		
	am 6209	June 9, 1909	a 2 V 4 b		
	am 10265	Nov. 9, 1914	V 0 b 2	very poor, large im.	
20 -30	am 10103	Sept. 9, 1914	c 5 V 4 2		
20 -30	am 10905	July 29, 1915	c 1 V 10 2 ?	(marked	
19 -45	am 11450	Nov. 13, 1915	a 3 V 2 2		
	am 10930	Aug. 1, 1915	c 5 V 4 2		
	am 10772	July 10, 1915	a 3 V 3 b		
	am 10616	June 3, 1915	a 3 V 2 b		
	am 10841	July 15, 1915	a 4 V 2 b		
	am 10765	July 9, 1915	a 3 V 2 b		
	am 10693	June 17, 1915	b 2 V 1 c		
	am 10968	Aug. 9, 1915	a 3 V 2 b		
	10976	Aug 11, 1915	a 3 V 3 b		
	10994	Aug 14, 1915	a 1 V 4 b		
	10903	July 29, 1915	c 2 V 0 d 3 d'		

Bright June 3, July 9, July 10, July 18, Aug 9, Aug 11, Aug 14 June 12

7h June 17, July 29, Aug 1, July 30, June 18

am 10913	July 30, 1915	d 1 V 2 d'	
10703	June 18, 1916	b 5 V 0 d 3 d'	c def.
16529	June 12, 1916	a 4 V 1 b	

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Tuesday, May 30, 1916

R Y Sagittarii

MC 10770 taken May 24, 1916

Variable not seen?

e (grating) = 0.4
f " = 0.4
g " = 0.1

f(gr) 2 c(gr) 1 d(gr) 6 e(gr) 0 f(gr) 3 g(gr)
Star a double on MC plate
d 2 d' #4 e

The variable is at least 3.8 magn. fainter than g. Probably there is an extremely faint image of the variable.
The variable is at least four magnitudes fainter than at maximum brightness.

The limit of the plate MC 10770 is nearly the same as that of Ann 10905, and is, therefore, probably not fainter than the thirteenth magnitude

Monday, June 5, 1916

R Y Sagittarii

MC 10822 taken June 1, 1916
f (grating) = 0.7?
g (grating) = 0.3
Variable not seen.
The variable is at least 4 magnitudes fainter than g

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Tuesday, July 25, 1916.

12.00

AM 10961

Plot 323

Comp Stars for R Sagittae

Scale N

Comparison for Leg with 88 K and Carte 20h +17.5°

		88 K Calc	88 K Calc	88 K Calc	88 K Calc	Carte		
a	5.9	1.89	2.13	7.79	8.03	1	5.8	2.39
a'	6.5	1.78	1.99	8.58	8.79	2	6.9	1.95
b	7.7	1.71	1.87	9.41	9.57	3	7.0	1.84
c	7.8	1.70	1.87	9.50	9.67	4	7.7	1.60
d	7.6	1.71	1.87	9.31	9.47	5	7.8	1.94
e	8.0	1.69	1.86	9.69	9.86	6	8.5	2.06
h	8.8	1.67	1.86	10.47	10.66	7	8.7	2.16
e'	8.8	1.67	1.86	10.47	10.66	8	8.9 9.5	1.57
f	7.9	1.69	1.86	9.59 (5)	9.76	9	9.6	1.88
g	8.8	1.67	1.86	10.47 (10)	10.66	10	9.7	2.09
e'	8.0	1.69	1.86	9.86 (69)	9.86	11	10.1	2.13
k	8.9	1.66	1.87	10.56	10.76	12	10.5 ?	2.11
l	9.6	1.71	1.93	11.31	11.53			
m	9.8	1.80	1.98	11.60	11.78			
n	10.1	1.98	2.03	12.08	12.13			
o	9.5	10.4? (2.17)	(2.11)	12.57 ?	12.51 ?			
Nav	8.8	1.67	1.86	10.47	10.66			

88 K

1	4.6	2.18
2	6.6	1.56
3	7.0	1.89
4	7.6	1.72
5	8.6	1.71
6	8.8	1.69
7	9.5	1.53
8	9.8	1.93
9	10.0	1.82
10	10.4?	2.17
11	m2	

Tuesday, July 25, 1916

Plot 323

AM 11357

Comparison Stars for R Sagittae

Comparison for Leg with 88 K and Carte 20h +17.5°

		88 K Calc	88 K Calc	88 K Calc	88 K Calc	Carte		
a	6.4	1.91 (53)	·	7.74	·	1	6.4	1.79
a'	6.7	1.82	1.72	8.23	8.42	2	7.4	1.45
b	7.7	1.40	1.68	9.14	9.38	3	9.0	1.84
c	7.8	1.44	1.68	9.24	9.48	4	7.8	1.50
d	7.6	1.45	1.68	9.05	9.28	5	8.0	1.74
e	8.2	1.45	1.69	9.65	9.89	6	8.5	2.06
h	8.6	1.46	1.72	10.06	10.32	7	9.1	1.76
e'	8.8	1.47	1.74	10.27	10.54	8	9.7	1.37
f	7.9	1.44	1.68	9.34	9.58	9	9.6	1.88
g	9.1	1.48	1.79	10.58	10.89	10	9.7	2.09
e'	9.0	1.48	1.78	10.48	10.78	11	10.3?	1.93
k	9.6	1.59	1.87	11.11	11.47	12	ns	
l	9.9	1.53	1.92	11.43	11.72			
m	10.0	1.59	1.94	11.54	11.94			
n	10.3	1.57	1.98	11.87	12.28			
o	ns							
Nav	9.2	1.48	1.80	10.68	11.00			

88 K

1	4.7?	1.88
2	6.6	1.56
3	7.5	1.39
4	7.8	1.52
5	8.9	1.41
6	9.0	1.49
7	9.5	1.53
8	9.5 10.2	1.53
9	10.2 10.2?	1.62
10	* lg	·
11		

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Tuesday, July 25, 1916

AM 10692

Plat 323

Comp Stars for R Sagittae

Scale N

Compared for the Log with 88K and Carte 20h + 17.5°

		88K	Carte	88K	Carte			
a	5.6	~~133~~	·	7.53	·	Carte 1	5.6	2.59
a'	6.5	186	268	8.38	9.18	2	5.9	2.95
b	7.0	187	260	887	9.60	3	6.0	2.54
c	7.4	184	258	9.24	9.90	4	5.9	2.40
d	7.1	185	258	895	968	5	7.1	2.64
e	7.8	181	240	961	10.20	6	8.3	2.26
e'	8.0	180	233	980	10.33	7	9.0	1.86
e²	8.6	179	210	10.39	10.70	8	9.9	1.37
f	7.7	182	242	9.52	1012	9	9.8	1.68
g	8.1	180	203	1060	1083	10	9.9	1.89
h	8.7	179	206	1049	10.76	11	10.5?	1.73
K	9.6	188	178	1148	11.38	12	m s	
l	9.5	190	174	1170	11.54			
m	9.9	193	172	1183	1162			
n	10.3	199	163	12.29?	11.93?			
o	tf							
(Var)	7.5	182	248	932	998			

Carte Regim very low on this plate. Reject?
(Remark entered before reduction)

88K

1	4.7	1.88
2	6.2	1.96
3	6.7	2.19
4	7.5	1.82
5	8.6	1.71
6	8.8	1.69
7	9.1	1.93
8	tf	·
9	10.0	1.82
10	10.4?	2.17
11	m s	

Tuesday July 25, 1916.

RC 16696

Plat 324

Comp Stars for R Sagittae

Scale N

Compared for Log with 88K and Carte 20h + 17.5°

		88K	Carte	88K	Carte			
a	5.6	216	·	7.70	·	Carte 1	6.0	2.19
a'	6.7	188	216	8.58	886	2	6.7	2.15
b	7.7	169	193	9.39	9.63	3	6.7	2.14
c	7.6	170	196	9.30	9.56	4	6.6	2.50
d	7.3	175	203	905	933	5	8.0	1.74
e	8.2	163	182	983	1002	6	8.9	1.66
e'	8.5	159	176	1009	1026	7	9.5	1.36
e²	8.9	154	167	1044	1057	8	9.8	1.21
f	8.1	164	184	974	994	9	10.0	1.45
g	9.1	153	163	1063	1073	10	10.3?	1.49
h	9.6	148	153	1106	1113	11	m s	
K	9.8	145	150	1125	1133	12	m s	
l	10.1	142	145	1152	1155			
m	10.3	140	142	1170?	1172?			
n	m s			·				
o	m s			·				
(Var)	8.6	158	173	1018	1033			

88K

1	4.9	2.38
2	6.2	1.96
3	7.1	1.79
4	7.9	1.42
5	8.5	1.31
6	9.7	0.89
7	9.7	1.23
8	10.0?	1.43
9	m s	
10	m s	
11		

Orbit. zero ~~star~~ No. 11 plat

Def. Image

Corr for 88K to be used only through reading for Star 5.

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Tuesday July 25, 1916

Bigelow's Method

RC 16268	RC 16597	RM 10679	RC 17631
a' 2 d	a' 4 d	a' 3 d	a' 3 d
d 4 c	d 2 f	d 3 f	d 2 f
c 0 ~~h~~	f 0 b	f 0 b	f 0 b
c 1 f	b 0 c	b 0 c	b 0 |c
f 4 e	c 3 e	c 2 e	c 3 e
e 0 ~~h~~ e'	e 1 e'	e' 1 e'	e 3 e'
e' 5 e²	e' 3 e²	e' 4 e²	e' 2 e²
~~e² 3 f~~	e² 3 g	e² 2 g	e² 2 g
e² 2 g	g 3 h	g 2 h	g 3 h
g 1 h	h 0 k	h 1 K	h 0 k
h 1 K	K 3 l	k 3 l	k 4 l
K 1 l	l 1 m	l 2 m	l 1 m
l 1 m	m 3 n	m 4 n	m 4 n
m n3	0 n3	n 2 0	0 f
0 n3			

12.45

R Sagittal Cont. Plt 324

Des	Grades	Diam	Sum	Curve	Magn
a'			0.00	8.78	8.78
d	2 4 3 3	30 1 1 0 0	0.30	883	9.13
f	5 2 3 2	30 1 1 0 1	0.60	888	9.48
b	1 0 0 0	0 1 1 0 0 0	0.58	888	9.46
c	0 0 0 0	00 0 0 0 0	0.58	888	9.46
e	5 3 2 3	32 2 0 1 0	0.90	893	9.83
e'	0 1 1 3	12 1 0 0 2	1.02	897	9.99
e²	5 3 4 2	35 1 1 0 2	1.37	907	10.44
g	2 3 2 2	22 0 1 0 0	1.59	914	10.73
h	1 3 2 3	22 1 1 0 1	1.81	923	11.04
K	1 0 1 0	05 1 0 1 0	1.86	926	11.12
l	1 3 3 4	28 2 0 0 1	2.14	937	11.51
m	1 1 2 1	12 0 0 1 0	226	941	11.67
n	3 4 4	37 . 1 0 0	263	955	1218
0	. 2 .	20 . a .	283	963	1246

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Wednesday, July 26, 1916

11.10

R Sagittae

am 10692	9.9	
am 6925	9.7	
ac 78	11.0	
ac 79	tp	
ac 88	11.2	
ac 359	10.2	
ac 392	11.0	
ac 470	9.6	
ac 594	10.1	
ac 848	9.5	
ac 894	tp	
ac 939	ms 10.0	
ac 1080	11.0	
ac 1497	9.5	
ac 1541	9.8	
ac 1724	tp	
ac 1735	tp	
ac 1762	10.2	
ac 1791	tp	
ac 1797	tp	
ac 1824	10.8	
am 10679	9.6	
ac 16696	10.0	
ac 16597	10.2	
ac 16268	10.7	
am 11357	11.0	
am 10961	10.7	
ac 17407	9.6 3q	
ac 16321	9.8	
am 10915	10.8	

Wednesday, July 26, 1916

R. Sagittae

am 10498	tp	
am 6938	9.9	
ac 1911	tp	
ac 1965	9.7	
ac 1993	9.6	
ac 2022	10.2	
ac 2584	9.9	
ac 2697	10.9	
ac 2722	9.5	
ac 2734	tp	
ac 2784	9.4	
ac 2797	9.5	
ac 2933	9.7	
ac 2992	tp	
ac 2995	tp	
ac 3027	11.1	
ac 3705	9.8	
ac 3736	tp	
ac 3757	tp	
ac 3775	9.5	
ac 3819	9.8	
ac 3853	9.6q	
ac 3862	9.9q	
ac 3905	10.9	
ac 3974	tp	
ac 3996	9.7	
ac 4046	tp	
ac 4058	9.7	
ac 4075	9.7	
ac 4274	10.8	

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Wednesday July 26, 1916

1125

R. Sagittae

AC	4934	9.5	AC6415	*p	
AC	4981	11.1 f	AC6441	11.0 f	
AC	5066	9.6	AC6478	9.5	
AC	5071	9.7	AC6500	9.9	
AC	5209	11.0 f	AC6505	9.5	
AC	5230	10.9	AC6599	10.8 f	
AC	5254	9.6	AC6657	9.4	
AC	5277	9.7	AC6694	9.9	
AC	5361	9.6	AC6752	9.5	
AC	5366	9.5	AM54	10.6	
AC	5428	9.7	AM96	*p	
AC	5433	10.3	AM103	*p	
AC	5537	9.8 f	AM122	9.6	
AC	5552	9.7	AM195	9.7	
AC	6369	*p	AM215	10.4	

Wednesday July 26, 1916

R Sagittae

AM	233	10.5 f	AM1090	*p
AM	519	*p	AM1102	9.8
			B	9.7
AM	558	10.2	AM1302	10.0
			B	9.7
AM	542	10.4	AM1338	10.1
			B	9.7
AM	600	9.9	C	9.5
			AM1349	9.9
AM	862	10.2	B	9.7
			C	9.6
AM	871	10.3	AM1375	9.5
			c	9.6
AM	890	9.7	b	9.7
			AM1634	9.5
AM	950	10.3	c	9.7
			b	9.6
AM	974	9.7	AM1905	9.5
			c	9.6
AC	17631	9.5	b	9.9
			AM1984	9.7
AC	16953	9.6	c	9.6
			b	9.8
AM	1003	9.9	AM2036	10.0
	B	9.9	c	9.5
AM	1078	*p	b	9.9
	B	9.9		

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Wednesday July 26, 1916

11.40

R Sagittae

Am 2066	10.5	Am 2849	9.5		
Bc	9.5	b	9.5		
Cb	9.5	c	9.5		
Am 2187	9.5	Am 2876	10.0		
Bc	9.5	b	9.9		
Cb	9.6	c	9.5		
Am 2300	10.2	Am 2908	9.7		
Bc	9.5	b	9.9		
Cb	9.5	c	9.5		
Am 2583	9.7	Am 2968	10.6		
Bc	9.5	b	9.5		
Cb	9.5	c	9.5		
Am 2664	10.0	Am 2991	10.2		
B	9.6	b	9.9		
C	9.6	c	9.5		
Am 2672	9.7	Am 3044	9.5		
B	9.5	b	9.5		
C	9.6	c	9.5		
Am 2729	10.2	Am 3083	10.1		
Bc	9.5	b	9.6		
Cb	9.5	c	9.5		
Am 2774	10.1	Am 3106	10.0		
B	9.5	b	9.7		
B & C may have been interchanged on previous plates		c	9.5		
		Am 3592	10.6		
		b	9.7		
		c	9.5		
B	10.0				
C	9.5				

Wednesday July 26, 1916

R Sagittae

Am 3618	b		AC 7624	9.7	
			b	9.9	
Am 3670	9.6		c	9.5	
b	9.9		AC 7672	9.7	
c	9.5		b	9.8	
Am 3721	9.8		c	9.5	
b	9.7		AC 7705	11.0	
c	9.5		b	9.9	
Am 3765	10.0		c	9.5	
b	9.9		AC 7780	9.8	
c	9.5		b	9.7	
Am 3893	10.1		c	9.6	
b	9.5		AC 7825	9.7	
c	9.5		b	9.9	
Am 3906	10.2		c	9.5	
b	9.8		AC 7840	9.7	
c	9.5		b	9.8	
Am 3913	9.8		c	9.5	
b	9.6		AC 7907	10.1	
c	9.5		b	9.6	
Am 3929	9.5		c	9.5	
b	9.6		AC 7982	b	
c	9.5		AC 8012	9.7	
AC 7081	10.3		b	9.7	
b	9.8		c	9.5	
c	9.5		Am 8383	b	
AC 7107	b		Am 8518	b	

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12 00 Wednesday July 26, 1916

R Sagittae

AC 8552	Ap	AC 9535	10.2		
AC 8596	9.5	h	9.8		
h	9.9	c	9.5		
c	9.6	AC 9590	9.6		
AC 8653	Ap	h	9.7		
AC 8704	9.7	c	9.5		
h	9.8	AC 9627	Ap		
c	9.5	AC 9694	9.7		
1.55 AC 8798	10.2	h	9.7		
h	9.8	c	9.5		
c	9.5	AC 9738	9.7		
AC 8813	10.8	h	9.8		
h	9.8	c	9.5		
c	9.6	AC 9737	Ap		
AC 8859	Ap	AC 9742	Ap		
AC 8895	9.7	AC 9813	9.5		
h	9.7	h	9.7		
c	9.6	c	9.4		
AC 8968	Ap	AC 9859	9.9		
AC 8976	9.8	h	9.7		
h	9.8	c	9.6		
c	9.6	AC 9866	9.9		
AC 9039	9.9 pg	h	9.7		
h		c	9.5		
AC 9529	10.1	AC 9907	9.5		
h	9.7	h	9.7		
c	9.5	c	9.6		

Wednesday July 26, 1916

R Sagittae

AC 9920	9.5			AC 10894	9.7
h	9.9			h	9.7
c	9.5			c	9.5
AC 9991	Ap			AC 10965	10.8 pg
AC 10009	m<9.9			h	9.7
h	9.5			c	9.4
c	9.5			AC 10976	Ap
AC 10465	10.8			AC 10982	9.7
h	9.8			h	9.6
c	9.5			c	9.5
AC 10581	10.2			AC 10998	9.7
h	9.7			h	9.8
c	9.5			c	9.5
AC 10668	9.6			AC 11009	9.8
b	9.6			h	9.6
c	9.5			c	9.5
AC 10670	9.7			AC 11043	Ap
h	9.8			AC 11082	10.7 pg
c	9.5			h	9.8
AC 10750	9.8			c	9.5
h	9.8			AC 11085	10.8 ✓
c	9.5			h	9.7 ✓
AC 10818	m<9.9 pg			c	9.5 ✓
h	9.8			AC 11122	9.7
c	9.5			h	9.6
AC 10856	9.4 ✓			c	9.5
h	9.7 ✓			AC 11141	9.6
c	9.5 ✓			b	9.6
				c	9.5

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Wednesday July 26, 1916

210

R Sagittae

QC	11627	A p	QC	12598	9.6		
QC	11628	A p		b	9.5		
QC	11629	A p		c	9.5		
QC	11755	10.0	QC	12631	9.7		
	b	9.6		b	9.7		
	c	9.5		c	9.6		
QC	11768	A p	QC	12701	10.6		
QC	11804	9.8		b	9.6		
	b	9.7		c	9.5		
	c	9.5	QC	12711	10.7		
QC	11829	A p		b	9.5		
QC	11969	9.7		c	9.5		
	b	9.5	QC	12739	9.85		
	c	9.5		b	9.7		
QC	12074	9.9		c	9.6		
	b	9.5	QM	3954	9.9		
	c	9.5		b	9.7		
QC	12126	9.6		c	9.5		
	b	9.6	QM	4192	9.6		
	c	9.5		b	9.7		
QC	12412	9.5		c	9.5		
	b	9.7	QM	4253	10.8		
	c	9.5		b	9.7		
QC	12419	9.6		c	9.0		
	b	9.7	QM	4285	9.7		
	c	9.5		b	9.6		
QC	12561	9.6		c	9.5		
	b	9.7					
	c	9.5					

Wednesday July 26, 1916

R Sagittae

QM	4306	9.7	QM	4697	9.6		
	b	9.7		b	9.6		
	c	9.5		c	9.5		
QM	4396	9.7	QM	4855	10.8		
	b	9.8		b	9.8		
	c	9.5		c	9.6		
QM	4458	11.6	baggmiage	QM	4929	10.3	
	b	9.8		b	9.6		
	c	9.4		c	9.5		
QM	4520	9.7	QM	4948	9.5		
	b	9.7		b	9.8		
	c	9.5		c	9.5		
QM	4537	9.7	QM	4973	9.4		
	b	9.7		b	9.7		
	c	9.6		c	9.5		
QM	4573	9.7	QM	4990	9.6		
	b	9.9		b	9.7		
	c	9.5		c	9.6		
QM	4603	10.3	QM	5053	9.7		
	b	9.7		b	9.7		
	c	9.6		c	9.5		
QM	4652	10 9.8	QM	5057	9.6		
	b	9.8		b	9.7		
	c	9.5		c	9.5		
QM	4656	11.5		QM	5088	9.6	
	b	9.7		b	9.8		
	c	9.5		c	9.5		

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Wednesday, July 26, 1916

2.25

R Sagittae

Am	5091	9.7	Am 5611	9.6	
	b	9.8	b	9.8	
	c	9.6	c	9.6	
Am	5149	9.7	Am 5653	10.3	
	b	9.6	b	9.7	
	c	9.5	c	9.5	
Am	5186	10.0	Am 5714	9.4	v
	b	9.6	b	9.7	v
	c	9.5	c	9.5	v
Am	5200	11.0	Am 5727	9.4	
	b	9.7	b	9.7	
	c	9.5	c	9.6	
Am	5404	9.8	Am 5781	9.6	
	b	9.6	b	9.7	
	c	9.5	c	9.5	
Am	~~5413~~	~~mag 2?~~	Am 5871	9.4	v
Am	5508	9.7	b	9.6	v
	b	9.7	c	9.5	v
	c	9.5	Am 5888	9.9	
Am	5838	10.3	b	9.7	
	b	9.5	c	9.5	
	c	9.5	Am 6141	9.6	
Am	5850	10.6	b	9.6	
	b	9.7	c	9.5	
	c	9.5	Am 6231	*p	
Am	5889	9.5	Am 6289	10.2	
	b	9.7	b	9.7	
	c	9.6	c	9.5	

Wednesday July 26, 1916

R Sagittae

Am	6407	9.5	AC 13257	*p	
	b	9.7	AC 13302	10.4	
	c	9.6	b	*p	
Am	6435	9.9	c	*p	
	b	9.7	AC 13390	9.5	v
	c	9.6	b	9.3	v
Am	6477	9.7	c	9.5	v
	b	9.7	AC 13410	9.5	v
	c	9.5	b	*p	
Am	6511	9.6	c	*p	v
	b	9.6	AC 13438	9.6	v
	c	9.5	b	9.6	v
Am	6662	9.7	c	9.6	v
	b	9.6	AC 13443	9.7	v
	c	9.5	b	9.7	v
Am	6723	9.6	c	9.6	
	b	9.6	AC 13499	Dev	
	c	9.5	AC 14012	*p	
AC	12771	*p	AC 14018	10.6	
AC	12806	9.6	b	9.5	
	b	9.5	c	9.5	
	c	9.6	AC 14086	*p	
AC	13216	*p	AC 14150	9.9	
AC	13222	*p	b	9.5	
AC	13227	9.7	c	9.5	
	b	9.4	AC 14210	10.3	
	c	9.6	b	9.5	
			c	9.6	

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2,45

Wednesday July 26, 1916

R Sagittae

aC 14216	9.9	aC 14563	*p
b	9.5	aC 14618	10.1
c	9.5	b+c	*p
aC 14222	10.0	aC 15213	10.1? f
b	*p	b	9.6
c	*p	c	9.6
aC 14240	9.5	aC 15225	9.7
b	9.5	b	9.5
c	9.6	c	9.5
aC 14267	*p	aC 15285	*p
aC 14281	11.1? f	aC 15310	9.8
b	9.5	b	9.5
c	9.5	c	9.6
aC 14322	*p	aC 15343	*p
aC 14394	10.1? q	aC 15397	9.7
b	9.5	b+c	*p
c	9.5	aC 15403	*p
aC 14422	10.2 v	aC 15412	9.6
b	*p v	b+c	*p
c	*p v	aC 15452	9.5
aC 14471	*p	b+c	*p
aC 14492	10.5 v	aC 15510	10.0
b	*p v	b+c	*p
c	*p v	aC 15513	10.1
aC 14528	10.6? q v	b	9.5
b	9.6 v	c	9.6
c	9.6 v	aC 15552	*p
		aC 15562	*p

Wednesday July 26, 1916

R Sagittae

aC 15569	*p	am 7173	10.0
aC 16424	9.10.0	b	9.7
b	9.7	c	9.5
c	9.5	am 7179	9.9
aC 16610	*p	b	9.7
aC 16642	10.0	c	9.6
b+c	*p	am 7219	10.6 v
~~aC 16715~~		b	9.7 v
aC 17125	10.5? q	c	9.5 v
b	9.7	am 7234	10.7 v
c	9.6	b	9.5 v
aC 17501	*p	c	9.6 v
am 7024	10.2? q	am 7293	10.9 v
b	9.5	b	9.7 v
c	9.5	c	9.5 v
am 7036	~~10.1~~ 11.0? q	am 7609	10.2 v
b	9.7 v	b	9.6
c	9.5 v	c	9.5
am 7048	11.1? f v	am 7662	9.7
b	9.7 v	b	9.5
c	9.5 v	c	9.6
am 7092	9.7	am 7684	10.3
b	9.7	b	9.6
c	9.6	c	9.7
am 7132	9.5	am 7701	*p
b	9.5	am 7726	*p
c	9.5	am 7783	9.6
		b	9.6
		c	9.5

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3.00

Wednesday July 26, 1916
R Sagittae

AM 7814	9.8	AM 8688	*p
b	9.6	AM 8702	*p
c	9.5	AM 8727	*p
AM 7895	9.8	AM 8736	*p
b	9.7	AM 8876	*p
c	9.6	AM 9001	*p
AM 8249	*p	AM 9027	*p
b	9.6	AM 9111	9.8
c	9.6	b	9.6
AM 8322	9.8	c	9.6
b	9.5	AM 9134	*p
c	9.6	AM 9199	10.2
AM 8373	9.7	b+c	*p
b+c	*p	AM 9234	10.4
AM 8405	9.8	b+c	*p
b+c	*p	AM 9255	9.9
AM 8425	9.6	b	9.5
b+c	*p	c	9.5
AM 8451	9.7	AM 9287	9.7
b+c	*p	b	9.5
AM 8525	10.8	c	9.5
b	9.5	AM 9309	*p
c	9.6	AM 9338	9.9
AM 8535	*p	b	9.6
AM 8562	*p	c	9.6
AM 8609	*p	AM 9435	9.7
AM 8631	*p	b	9.6
AM 8662	*p	c	9.6
AM 8671	*p		

Wednesday July 26, 1916
R Sagittae

AM 9460	*p	AC 13100	9.9 ✓
AM 9583	10.5	b	9.6 ✓
b+c	*p	c	9.6 ✓
AM 9487	*p	AC 11348	10.9 ✓
AM 10003	9.9	b	9.6 ✓
b+c	*p	c	9.6 ✓
AM 10500	9.8	AM 11015	9.4 ✓
b+c	*p	b	9.5 ✓
AM 10527	*p	c	9.5 ✓
AM 10528	9.9?	AM 10017	10.2 ✓
b+c	*p	b	9.6 ✓
AM 10849	10.1	c	9.5 ✓
b	9.7	AM 9459	*p
c	9.5	AC 8565	
AM 11097	9.8		
b+c	*p		
10min AM 11130			
interruption AM 4515	*p		
* AC? AM 6771	9.4 ✓		
b	9.5 ✓		
c	9.5 ✓		
AC 14558	9.6 ✓		
b	9.6 ✓		
c	9.5 ✓		
AC 16456	10.3 ✓		
b	9.4 ✓		
c	9.5 ✓		

3.20

* AM 6771 identified at 3h-60° ∴ I assumed plate to be AC

E.E.W.

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Wed. July 26, 1916

R Sagittae Cont

AC 8853
11.0? f
b 9.7
c 9.5

AC 8868
b spon

AC 549 Class C
9.9 throughout?
b is probably
brightest star
at beginning of
exp. and fourth
at end. Difficult
m=

AC 926 Exp. 1
11.1
b 9.7
c 9.6

Exp. 2
11.1?
b 9.7
c 9.5

Exp. 3
11.1
b 9.6
c 9.5

AC 926 Exp. 4
11.1
b 9.7
c 9.6

Exp. 5
sup.
a 9.7
b 9.6

AM 1057
b = c
Var. in diff.

AM 4503
c > b
Difficult

AM 5051
b = c

Multiple image plate
difficult to observe in this
region. Not especially important
as light of star changes
slowly.
Some indication of change
in b in AC 549; none in
other plates.

11,20

Thursday July 27, 1916

R Sagittae

AC	133	9.5	AC	1647	* p
	b+c	* p	AC	1695	* p
AC	326	* p	AC	1736	* p
AC	418	9.7	AC	1768	* p
	b	9.7	AC	1834	10.9? v
	c	9.7		b	9.8 v
AC	425	9.8		c	9.5 v
	b	9.7	AC	1870	9.6
	c	9.6		b	9.8
AC	502	9.7		c	9.6
	b	9.7	AC	1954	9.9
	c	9.6		b	9.8
AC	837	* p		c	9.0
AC	841	* p	AC	2572	9.6
AC	918	9.7		b+c	* p
	b	9.8	AC	2635	9.6
	c	9.5		b+c	* p
AC	988	10.1?	AC	2678	10.5 v
	b+c	* p		b	9.8 v
AC	1016	* p		c	9.6 v
	~~b=c~~		AC	2738	9.9
	c 3 b			b	9.9
AC	1170	* p		c	9.0
AC	1572	9.9	AC	2772	* p
	b	9.6	AC	2838	10.2? fe
	c	9.4		b+c	* p
AC	1613	* p	AC	2866	9.6
AC	1639			b	9.9
AC	1644			c	9.5

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11.30

Thursday July 27, 1916

R Sagittae

AC 2888	9.6	AC 5112	9.7		
b	9.9	b	9.5		
c	9.6	c	9.5		
AC 2924	9.7	AC 5117	9.9		
b	9.7	b	9.9		
c	9.5	c	9.5		
AC 2968	9.7	AC 5182	10.8 f e		
b	9.8	b+c	b p		
c	9.7	AC 5330	9.8		
AC 2978	9.7	b+c	b p		
b+c	b p	AC 5396	b p		
AC 3730	10.4	AC 5495	10.8? f e		
b	9.9	b+c	b p		
c	9.6	AC 5502	10.6? f e		
AC 4009	9.7	b+c	b p		
b	9.7	AC 5523	10.3? f e		
c	9.5	b+c	b p		
AC 4149	10.1? f e	AC 5532	10.1? f e		
b+c	b p	b+c	b p		
AC 4256	10.9? f e	AC 5649	9.8		
b+c	b p	b c3b			
AC 4739	9.7	AC 6294	b p		
b+c	b p	AC 6550	9.6		
AC 5039	10.1	AC 6640	9.7		
b+c	b p	AC 6892	10.7 ✓		
AC 5072	9.7	b	10.0 ✓		
b	9.9	c	9.5 ✓		
c	9.5				

11.45

Thursday July 27, 1916

R Sagittae

AC 7618	9.7	AC 10702	9.5		
AC 7795	9.7	c 3b			
AC 7916	10.7? f e ✓	AC 11016	9.7 ✓		
c 1b		c 2b			
AC 7993	9.6	AC 11096	10.9 f e ✓		
c 2b		b o c			
AC 8115	10.2? f e	AC 11109	10.0		
c 2b		c 1b			
AC 8889	10.6? f e ✓	AC 11715	9.9		
c 2b		b	9.7		
AC 9670	9.8 e	c	9.5		
c 3b		AC 11868	9.8		
AC 9778	10.4 f e	c 3b			
c 1b		AC 11946	9.6		
AC 9804	9.7	c 1b			
c 1b		AC 11940	9.6		
AC 9896	9.4 ✓	c o b			
b	9.8 ✓	AC 11994	9.7		
c	9.6 ✓	c 2b			
AC 9960	10.4? f e	AC 12406	9.5 ✓		
c 3b		c o b			
AC 10049	11.0 f e ✓	AC 12455	10.5 f e		
b+c		c 1b			
c 1b		AC 12492	10.2 f e		
AC 10515	9.8	b	9.5		
c o b		c	9.5		
AC 10632	b p	AC 12554	9.7		
		c o b			

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12.5

Thursday July 27, 1916

R Sagittae

AC 12754 9.7
c 1 r
AC 13212 9.7
r 1 c
certainly brighter than c
AC 13226 9.8
r 1 c
AC 13281 10.1 f e
r 9.4
c 9.6
correct
AC 13319 10.4? f e
r 1 c
AC 13399 9.6
9 r 0 c
AC 13427 9.6
r 0 c
AC 13544 9.6
r 1 c
AC 14097 * p
AC 14180 10.2? f e
r 9.5
c 9.6
AC 14184 * p
r 1 c
AC 14312 9.6
r 1 c
correct

AC 14351 9.7
r 9.6
c 9.6
AC 14499 11.0 f e v
r 1 c
AC 14595 9.9
r 0 c
AC 14609 10.2 f e
r 0 c
AC 15327 9.7
r 0 c
AC 15441 9.5
r 0 c
AC 15448 9.9 f e
r 0 c
AC 15474 10.0 f e
r 1 c
AC 15482 10.1 f e
r 0 c
AC 15509 10.1 f e
r 0 c
AC 15770 10.0 f e
r 0 c
AC 16400 9.9
r 9.5
c 9.5
AC 16560 9.6
r 4 c * p

R. Sagittae

AC 16648 9.8? f e
r 0 c
AC 16787 10.1 f e
r 0 c
AC 16929 9.6
r 0 c
AC 17059 9.8
r 1 c
AC 17471 * p
r 1 c
AC 17632 9.9
r 1 c
AM 3023 * r
AM 5056 * p
12.25

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R Sagittae

Observations on Yellow plates

AC 15546
a-b
b3 b'a'
a'b'1c
c1d
d.V
V4L

a 15682
a-b
b.b'a'
a'b'3c
c od
Vari. fl.

AC 15657
a-b
b3b'a'
a'b'1c
ood
d5e
e2f
f1V
V3g

AC 15654
a-b
b4b'a'
a'b'2c
c o d
d5e
e3f
f1V
g n.s.

AC 16619
a4b
b'b'
b'3b'a'
a'b'2c
c o d

V n.s.

AC 13499
a 4 b'
b'4b
b2b'a'
a'b'3c
c o d
V n.s.

Thurs. July 27, 1916

R Sagittae

Yellow Plates cont

AC 16778
a 5 b'
b 2 b
b 3 a'
a' 2 c
c 1 d
d 3 V
V 3 e

AC 17011
a 5 b'
b' 4 b
b 3 a'
a' 2 c
c 1 d
d 5 V
V o e
V 2 f

am 11042
a 3 b'
b' 5 b
b 3 a'
a' 2 c
b 1 V
V 2 a'

Re-mens. Sanliat Tfp

AC 13499
a 2 b
b' 5 b
b 4 a'
a' 2 c

AC 16619
a 1 b'
b' 1 b
b 5 a'
a' 2 c

AC 16547
a 3 b'
f 2 b
b 2 a'
a' 4 c

am 11042
a 1 b'
b' 5 b
b 5 a'
a' o c

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R Sagittae

Yellow Plate Re-mens. South at Ht. Cent.

AC 65

AC 15654
a 2 b'
b' 3 a
b 4 a'
a' 2 c

AC 17011
a 0 b'
b' 5 b
b 2 a'
a' 1 c

AC 15257
a 1 b'
b' 4 b
b 2 a'
a' 2 c

ac 16775
a 1 b'
b' 5 b
b 3 a'
a' 2 c

AC 15682
a 1 a'
a' 4 b
a 1 b'
b' 4 b
b 2 a'
a' 2 c

The following AC plates taken with yellow light are two prin:-
AC 15636
15705
16074
16277
16625
13474
15356
anc 11252

Thursday July 27, 1916

R Sagittae

Plates found to be too poor

ac 386	AC 14247
aC 17517	14201
" 16847	14195
16762	14180
16697	14129
16641	11686
16609	13357
16293	1325-6
16141	13246
15814	13223
15625	13195
15595	13055
15561	12476
15512	12458
15496	11954
15422	11828
15416	11773
15391	11718
15316	5010
15313	4973
15296	4956+4958
15253	4939
15191	4093
14425	4031
14401	3946
14321	3879
14299	3767
14291	3844
14261	3804

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Thursday July 27, 1916
R Sagittae

Plates found to be too poor

AC 3675	AC 8668
3594	8623
3571	8078
3404	8055
3253	7868
3195	7785
2844	7733
2791	7669
2572	7478
2492	7162
2000	6977
1957	6760
11074	6685
11050	6615
11001	60-86
10909	643-0
10895	6422
10843	6341
10808	6190
10785	5384
10589	5163
9798	5104
9736	5033
9635	
9618	
9536	
8987	
8716	
8694	

Thursday July 27, 1916
R Sagittae

Plates rem.		mags.	p.	Mean	2 at top			
AM 5714	9.4	9.4	132	9.40	00	AC 14471	t p.	t p.
b	9.6	9.7		9.65	01	AC 13410	9.5	9.5 133 9.50 00
c	9.4	9.5		9.50	00	b	9.6	t p. 9.6 a g
AM 5589	9.4	9.5	132	9.45	01	c	9.5	t p. 9.5 a g
b	9.6	9.7		9.65	01	AC 13390	9.5	9.5 133 9.50 00
c	9.6	9.6		9.60	00	b	9.4	9.3 9.35 01
AM 5850	10.6	10.6	132	10.60	00	c	9.5	9.5 9.50 00
b	9.6	9.7		9.65	01	AM 6407	9.5	9.5 133 9.50 00
c	9.4	9.5		9.45	01	b	9.7	9.7 9.70 00
AM 5200	11.0	11.0?	132	11.00?	00	c	9.6	9.6 9.60 00
b	9.7	9.7		9.70	00	AM 5871	9.4	9.4 132 9.40 00
c	9.6	9.5		9.55	01	b	9.6	9.6 9.60 00
AM 5186	10.8	10.8	132	10.80	00	c	9.4	9.5 9.55 01
b	9.7	9.6		9.65	10	AC 14422	10.4 q	10.2 134 10.30? 11
c	9.5	9.5		9.50	00	b o c		:
AM 4973	9.4	9.4	131	9.40	00			
b	9.6	9.7		9.65	01	AC 13442	9.6	9.7 133 9.65 01
c	9.5	9.5		9.50	00	b	9.6	9.7 9.65 01
AM 4855	10.8	10.8	131	10.80	00	c	9.5	9.6 9.55 10
b	9.6	9.8		9.70	11	AM 7219	10.5	10.6 135 10.55 10
c	9.5	9.6		9.55	10	b	9.7	9.7 9.70 00
AC 14492	10.9	10.8		10.85	10	c	9.5	9.5 9.50 00
b	9.5	t p.		9.5	a.	AM 7048	11.1?	11.1? 135 11.10? 00
c	9.5	t p.		9.5	a.	b	9.6	9.7 9.65 01
AC 14018	10.6	10.6	133	10.60	00	c	9.5	9.5 9.50 00
b	9.5	9.5		9.50	00	AM 7036	11.1	11.0? 135 11.05? 10
c	9.5	9.5		9.50	00	b	9.7	9.7 9.70 00
						c	9.5	9.5 9.50 00

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Thursday July 27, 1916

2.10

R Sagittae

	Plates remeasured				S at top			
ac 14528	10.6?	10.6? 134	10.60? 00		ac 5495	10.6	10.8? fe 140	10.7? 0 1 fg
h o c	b 9.6	9.6	9.6 R a		c 1 h		:	
	c 9.6	9.6	9.6 R a				:	
ac 13108	9.8	9.9 137	9.85 01		ac 5502	10.6?	10.6? fe 140	10.60? f 00
h	9.5	9.6	9.55 1 0		c 1 h		:	
c	9.6	9.6	9.60 00		ac 4256	11.0?	10.9? fe 140	10.95 f 01
am 11348	10.9	10.9 137	10.90 00		c 2 h		k :	
h	9.6	9.6	9.55 1 0				c :	
c	9.5	9.6	9.55 1 0		ac 2678	10.9?	10.8 134	10.85 1 0
p. 137? am: ac 6771	9.5	9.4	9.45 1 0		c 1 h		b 9.8	9.8 R a
h	9.6	9.5	9.55 0 1				c 9.6	9.6 R a
c	9.6	9.5	9.55 0 1		ac 1824	11.0?	10.9? 139	10.95 0 1
am 8525	10.8	10.8 136	10.80 00		c 2 h		b 9.8	9.8 R a
h 1 c	b 9.5	9.5	9.5 R a				c 9.5	9.5 R a
	c 9.6	9.6	9.6 R a		am 11015	9.4	9.4 137	9.40 00
am 7293	10.9	10.9 135	10.90 00		h	9.5	9.5	9.50 00
h	9.8	9.7	9.75 0 1		c	9.5	9.5	9.50 00
c	9.6	9.5	9.55 0 1		am 10017	10.3	10.2 137	10.25 10
am 7234	10.6?	10.7 135	10.65 01		h	9.6	9.6	9.60 00
c 2 h	b 9.8	9.5	9.5 R a		v	9.6	9.5	9.55 10
	c 9.6	9.6	9.6 R a		am 4656	11.3?	11.5? 131	11.40 1 1
ac 16456	10.3	10.3 137	10.30 00		h	9.6	9.7	9.65 01
h	9.4	9.4	9.40 00		c	9.5	9.5	9.50 00
c	9.5	9.5	9.50 00		am 4458	10.9	11.0? 131	10.95 1 0
corrected					h	9.7	9.8	9.75 1 0
am 8562	* p	t.f. 136			c	9.6	9.4	9.50 1 1
h o c					am 4253	10.8	10.8 130	10.80 00
ac 13438	9.6	9.6 133	9.60 00		h	9.8	9.7	9.75 0 1
b	9.5	9.6	9.55 1 0		c	9.5	9.5	9.50 00
c	9.6	9.6	9.60 00		ac 12711	10.7?	10.7 130	10.70 00
					c 2 h		b 9.5	9.5 R a
							c 9.5	9.5 R a

Thursday July 27, 1916

R Sagittae

	Plates remeasured				S at top		Mag p	
ac 12739	9.4	9.5 130	9.45 01		ac 7705	11.0 f	11.0 f 127	11.00 f 00
h o c	b 9.7	9.7	9.7 R a		c 2 h	b 9.9		9.9 R a
	c 9.6	9.6	9.6 R a			c 9.5		9.5 R a
ac 12701	10.5	10.6 130	10.70 11		am 2968	10.5	10.6 128 b	10.55 1 0
h o c	b 9.6	9.6	9.6 R a		c 1 h	b	9.8	9.8 R a
	c 9.5	9.5	9.5 R a			c	9.5	9.5 R a
ac 12412	9.4	9.4 130	9.40 00		am 233	10.6?	10.8 f 125	10.70 f 1 1
h	9.5	9.7	9.60 1 1		c 1 h			
c	9.5	9.5	9.50 00		am 54	10.4	10.6 134	10.50 1 1
ac 11885	10.5	10.8 139	10.80 00		h	9.7		9.7 R a
h	9.6	9.7	9.65 0 1		c	9.5		9.5 R a
c	9.5	9.5	9.50 00		ac 6657	9.5	9.4 134	9.45 1 0
ac 12561	9.6	9.6 130	9.60 00		c 1 h			
h	9.5	9.7	9.60 1 1		am 4515	* p		
c	9.5	9.5	9.50 00		ac 6599	* p	10.8 f 134	10.85 f a .
ac 11082	10.5?	10.7? 139	10.75? 0 1		ac 6441	10.9?	11.0? f 134	10.95? f 1 0
h t c * p	b 9.8	9.8 R a			c 2 h			
	c 9.5	9.5 R a						
ac 10856	9.5	9.4 139	9.45 1 0		ac 5230	10.8	10.9 134	10.85 01
h	9.7	9.7	9.70 00		h	9.9		9.9 R a
c	9.5	9.5	9.50 00		c	9.5		9.5 R a
ac 10465	10.5?	10.8? 139	10.80 00		ac 5209	11.1?	11.0? 134	11.05? 1 0
h 1 c	b 9.8	9.8 R a			b	9.7		9.7 R a
	c 9.5	9.5 R a			c	9.5		9.5 R a
ac 9907	9.4	9.5 138	9.45 01		ac 4981	11.1?	11.1 134	11.10 00
h	9.7	9.7	9.70 00		c 3 h			
c	9.5	9.6	9.55 1 0					
ac 5813	10.6?	10.6? 138	10.6 00		ac 4274	10.8 f	10.8 f 133	10.80 00
c 2 h	b 9.8	9.5 R a			h	9.7		9.7 R a
	c 9.6	9.6 R a			c	9.5		9.5 R a
ac 7907	10.7?	10.7	10.70 00		ac 3908	10.8? f	10.9 f 133	10.85 01
h o c	b 9.6	9.6 R a			h	9.8		9.8 R a
	c 9.5	9.6 R a			c	9.5		9.5 R a

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Thursday July 27, 1916

R Sagittae

2.20

Plates remeasured

		Magn. fo		Sat To	Magn. fo	
a c 3027	11.0	11.1 133	11.05 01	ac1050	11.0	11.0 122 11.00 00
h	9.6		9.6 R 2	h	9.6	9.6 R 2
c	9.5		9.5 R 2	c	9.5	9.5 R 2
ac 2784	9.4	9.4 133	9.40 00	ac392	10.97 f	11.0 122 10.95 1 0
h	9.6		9.6 R 2	h	9.6	9.6 R 2
c	9.5		9.5 R 2	c	9.4	9.4 R 2
ac 2697	10.9	10.9 133	10.90 00	ac88	11.07 f	11.2? 122 11.10? 1 1
h	9.7		9.7 R 2	h	9.7	9.7 R 2
c	9.5		9.5 R 2	c	9.5	9.5 R 2
qm 10915	10.9	10.8 122	10.85 1 0	ac78	10.5 f	11.0 122 10.95 2 1
h	9.5		9.5 R 2	h	9.7	9.7 R 2
c	9.5		9.5 R 2	c	9.5	9.5 R 2
qm 10961	10.9	10.7 122	10.80 1 1	ac8889	10.4 f	10.6? f 141 10.50 f 1 1
h	9.5		9.5 R 2	h	9.7	9.7 R 2
c	9.5		9.5 R 2	c	9.6	9.6 R 2
ac 1653-8	9.5	9.6 137	9.55 1 0	ac7916	10.9 f	10.7? f 141 10.70 f 00
h	9.5	9.6	9.55 1 0	c 1 h		
c	9.5	9.5	9.50 00	ac6892	10.7	10.7 140 10.70 00
qm 11257	10.5	10.8 122	10.75 3 2	h	9.7	10.0 9.85 1 2
h	9.4	9.6	9.4 R 2	c	9.5	9.5 9.50 00
c	9.5	9.5	9.5 R 2	ac14499	10.8	11.0 f 142 10.950 1 1
ac 1626 8	10.7	10.7 122	10.70 00	h o c		
h	9.5		9.5 R 2	ac12406	9.4	9.5 141 9.45 01
c	9.5		9.5 R 2	c 1 h		
ac 1824	10.9	10.8 122	10.85 10	ac11096	11.0 f	10.9 f 141 10.95 f 02
h	9.7		9.7 R 2	c 1 h		
c	9.5		9.5 R 2	ac10049	11.0	11.0 f 141 11.00 00
				c 2 h		

Thursday July 27, 1916

R Sagittae

Plates remeasured Sat To

ac 9996	9.3	9.4 141	9.45 10
c 2 h		9.8	9.8 R 2
		9.6	9.6 R 2
qm 10692	9.5	9.7 122	9.60 1 1
h	9.4		9.4 R 2
c	9.5		9.5 R 2
2.43			

E E W

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11.00

Thursday Aug. 3, 1916

R Sagittae

			Measures repeated	Sat top
ac	2888	9.6		
	b	9.9		
	c	9.6		
ac	5033	10.0		
	a c b			
ac	5092	9.7		
	b	10.1		
	c	9.5		
ac	5112	9.7		
	b	9.8		
	c	9.5		
ac	5117	9.8		
	b	9.9		
	c	9.6		
ac	5182	10.9		
	b	9.8		
	c	9.5		
ac	5330	10.0		
	b	9.8		
	c	9.5		
ac	5523	10.4		
	b	9.7		
	c	9.5		
ac	5532	10.1		
	c a b			
ac	5649	9.7		
	b	9.9		
	c	9.5		
ac	6550	9.6		
	b	9.8		
	c	9.5		
ac	6640	9.7		
	b	9.9		
	c	9.5		
ac	7618	9.6		
	b	9.6		
	c	9.5		
am	2300	10.0		
	b	9.6		
	c	9.5		
am	2583	9.6		
	b	9.7		
	c	9.5		
am	2664	9.9		
	b	9.7		
	c	9.5		
am	2672	9.9		
	b	9.6		
	c	9.5		
am	2729	10.2		
	b	9.9		
	c	9.6		
am	2774	11.1		
	b	9.9		
	c	9.5		

Thursday Aug 3, 1916

R Sagittae

			Measures repeated	Sat top
am	2849	9.8		
	b	9.8		
	c	9.5		
am	2876	9.8		
	b	9.7		
	c	9.5		
am	2908	9.6		
	b	9.5		
	c	9.5		
am	2991	11.0		
	b	9.5		
	c	9.5		
am	3044	9.6		
	b	9.6		
	c	9.5		
am	3083	10.2		
	b	9.7		
	c	9.5		
am	3106	10.0		
	b	9.5		
	c	9.5		
am	3592	10.6		
	b	9.5		
	c	9.4		
am	3670	9.6		
	b	9.8		
	c	9.5		
am	3721	9.7		
	b	9.6		
	c	9.5		
am	3705	9.9		
	b	9.8		
	c	9.5		
am	3893	9.9		
	b	9.7		
	c	9.5		
am	3906	10.0		
	b	9.8		
	c	9.5		
ac	7795	9.6		
	a c b			
	e			
ac	848	9.6	e	
ac	133	9.5	e	
ac	418	9.7	e	
	c b			
ac	425	9.7		
	b	9.6		
	c	9.5		
ac	502	9.7		
	b	9.8		
	c	9.5		
ac	918	9.7		
	b	9.8		
	c	9.5		

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11,15

Thurs. Aug 3, 1916

R Sagittae

	Measures repeated	Sat Top
AC 988	10.1?	
b	9.5	
c	9.5	
AC 1016	A P	
AC 1572	9.6	
b	9.5	
c	9.5	
AC 1670	9.6	
b	9.6	
c	9.5	
AM 890	9.7	
b	9.6	
c	9.5	
AM 3913	9.9	
b	9.6	
c	9.5	
AM 3929	9.5	
b	9.5	
c	9.5	
AM 3954	10.0	
b	9.5	
c	9.5	
AM 4192	9.7	
b	9.5	
c	9.5	
AM 4285	9.8	
b	9.6	
c	9.5	
AM 4306	9.7	
b	9.6	
c	9.4	
AM 4396	9.7	
b	9.7	
c	9.5	
AM 4520	9.7	
b	9.7	
c	9.5	
AM 4537	9.7	
b	9.5	
c	9.5	
AM 1102	9.8	
b	9.5	
c	9.5	
AM 1302	10.2	
b	9.6	
c	9.6	
AM 1338	10.0	
b	9.6	
c	9.4	
AM 1347	9.9	
b	9.7	
c	9.5	
AM 1375	9.8	
b	9.6	
c	9.5	

Thurs Aug 3, 1916

R Sagittae

	Measures repeated	Sat Top
AM 1634	9.6	
b	9.5	
c	9.6	
AM 1905	9.5	
b	9.9	
c	9.5	
AM 1984	9.8	
b	9.8	
c	9.5	
AM 2036	9.9	
b	9.9	
c	9.5	
AM 2066	10.5	
b	9.8	
c	9.4	
AM 2187	9.8	
b	9.7	
c	9.5	
AM 950	10.2?	
b	9.6	
c	9.5	
AM 974	9.6	
b	9.7	
c	9.5	
AM 1003	9.7	
b	9.9	
c	9.5	
AM 122	9.7	
b	9.6	
c	9.5	
AM 195	9.8	
b	9.5	
c	9.5	
AM 218	10.3?	
c : b		
AM 518	10.1?	
c 3b		
AM 600	10.0	
b	9.5	
c	9.4	
AM 762	10.2	
b	9.5	
c	9.5	
AM 871	10.3	
b	9.5	
c	9.4	
AC 1954	9.9	
b	9.8	
c	9.5	
AC 2572	9.5?	
b	9.7	
c	9.5	
AC 2635	A P	
AC 2738	9.9?	
c : b		

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Thurs. Aug 3, 1916.

11.30

R Sagittae

Measures repeated S at top

AC 2838	10.1?	✓	AC 6508	9.8	✓
	b	9.5	AC 6694	tp	✓
	c	9.5	AC 6752	9.8	✓
AC 2866	9.6	✓	b	9.7	
	b	9.9	c	9.5	
	c	9.5	AC 7081	10.2?	✓
AC 2924	9.7	✓	b	9.7	
	b	9.7	c	9.4	
	c	9.5	AC 7624	9.7	✓
AC 2968	9.7	✓	b	9.7	
	b a b		c	9.5	
AC 2978	9.6	✓	AC 7672	9.6	✓
	b	9.7	b	9.8	
	c	9.5	c	9.5	
AC 3730	10.6?	✓	AC 7780	9.9	✓
	b	10.0	b	9.7	
	c	9.5	c	9.5	
AC 4009	9.7	✓	AC 5537	tp	✓
	b	9.7	AC 5552	9.7	✓
	c	9.5	b	9.8	
AC 4149	9.8	✓	c	9.5	
	b c tp		AC 5254	9.7	✓
AC 4739	9.6	✓	b	9.9	
	b	9.5	c	9.5	
	c	9.5	AC 5277	9.7	✓
AC 6478	9.5	✓	b	9.6	
AC 6500	tp	✓	c	9.5	

Thurs Aug 3, 1916

R Sagittae

Measures repeated S at top

AC 5361	9.8	✓	AC 3853	tp	✓
b	9.9		AC 3775	tp	✓
c	9.5		AC 3862	10.2?	✓
AC 5366	9.6	✓	b	9.9?	
b	9.8		c	9.5?	
c	9.5		AC 3708	tp	✓
AC 5428	tp	✓	AC 359	9.9	✓
AC 5433	10.1	✓	b	9.5	
b	9.8		c	9.5	
c	9.5		AC 470	9.7	✓
AC 4934	9.5	✓	b	9.4	
b	9.7		c	9.5	
c	9.5		AC 544	10.1?	✓
AC 5066	9.7	✓	b	9.5	
b	9.9		c	9.5	
c	9.5		AC 939	tp	✓
AC 5071	tp	✓	AC 1497	9.6	✓
AC 4058	9.8	✓	b	9.7	
b	9.9		c	9.5	
c	9.5		AC 1541	10.1	✓
AC 4075	9.7	✓	b	9.6	
b	9.7		c	9.5	
c	9.5		AC 1762	9.9	✓
AC 3996	9.6	✓	b	9.7	
b	9.7		c	9.5	
c	9.5		AC 1965	9.9	+ 10mm out
AC 3819	9.8	✓	b	9.7	
			c	9.4	

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Thurs. Aug 13 1916

12.00

R Sagittae

Measures imputed Sat top

ac 1993	9.6		ac 11109	10.0	
	b	9.7		b	9.7
	c	9.5		c	9.5
ac 2022	10.1		ac 11815	9.9	
	b	9.5		b	9.7
	c	9.5		c	9.5
ac 2584	9.9		ac 11869	10.3	
	b	9.6		b	9.7
	c	9.5		c	9.6
ac 2722	9.6		ac 11940	9.7	
	b	9.5		b	tp
	c	9.6	ac 11946	9.6	
ac 2897	9.6		ac 11994	tp	
	b	9.5	ac 12455	10.5	
	c	9.5		b	9.7
ac 2933	9.5		~~ac 12492~~ c	9.5	
	b	9.5	ac 12492	10.2	
12.05	c	9.5		b	9.5
1.50 ac 7125	10.6			c	9.5
	b	9.6	ac 12554	9.7	
	c	9.5		b	9.7
ac 10702	10.9			c	9.6
	b	9.6	ac 12754	9.5	
	c	9.5		b	9.5
ac 11016	9.7			c	9.4
	b	9.7	ac 13212	9.9	
	c	9.5		b	9.5
				c	9.6

Thurs Aug 3, 1916

R Sagittae

ac 13226	9.8		ac 15337	9.6	
	b	9.5		b	9.4
	c	9.5		c	9.5
ac 13281	10.2		ac 15441	9.5	
	b	9.4		b	9.5
	c	9.5		c	9.5
ac 13319	tp		ac 15446	9.7	
ac 13399	9.5			b	9.4
	b	9.5		c	9.5
	c	9.5	ac 15474	9.9	
ac 13427	9.6			b	9.4
	b	9.6		c	9.5
	c	9.5	ac 15482	10.0	
ac 13544	9.7			b	o c
	b	9.5	ac 15509	10.2	
	c	9.5		b	o c
ac 14180	tp		ac 15778	9.9	
ac 14313	tp			b	9.4
ac 14351	9.7			c	9.5
	b	9.5	ac 8115	10.2	
	c	9.5	ac 9670	9.8	
ac 14595	9.9			b	9.7
	b	9.5		c	9.5
	c	9.5	ac 9771	10.4	
ac 14609	10.2			b	9.7
	b	9.5		c	9.5
	c	9.5	ac 9804	9.6	
				b	9.6
				c	9.6

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205

Thurs. Aug 3, 1916.

R Sagittae

	Measures repeated		Sat Trap	
a e 9760	10.3		am 5653	10.3
b	9.7		b	9.4
c	9.5		c	9.5
am 5053	9.8		am 5727	9.4
b	9.7		b	9.5
c	9.4		c	9.5
am 5057	9.7		am 5781	9.6
b	9.7		b	9.5
c	9.5		c	9.5
am 5078	9.6		am 5836	10.2
b	9.6		b	9.5
c	9.5		c	9.5
am 5091	9.7		am 5888	10.0
b	9.7		b	9.6
c	9.5		c	9.5
am 5149	9.7		am 6289	10.2
b	9.4		b	9.5
c	9.5		c	9.5
am 5404	9.9		am 6435	9.9
b	9.6		b	9.5
c	9.6		c	9.5
am 5508	9.7		am 6477	9.7
b	9.7		b	9.5
c	9.5		c	9.5
am 5611	9.6		am 6511	9.4
b	9.7		b	9.5
c	9.5		c	9.4

Thurs Aug 3, 1916

R Sagittae

	Measures repeated		Sat trap	
am 6662	9.6		am 7684	10.4
b	9.5		b	9.4
c	9.5		c	9.5
am 6723	9.6		am 7783	9.7
b	9.5		b	9.5
c	9.5		c	9.5
am 6735	9.5		am 7804	9.5
b	9.6		b	9.4
c	9.5		c	9.5
am 6938	9.8?		am 7895	9.8
am 7024	10.3		b	9.6
b	9.7		c	9.5
c	9.5		am 8323	9.8
am 7092	9.6		b	9.5
b	9.6		c	9.6
c	9.5		am 8373	9.7
am 7132	9.7?		b	9.5
am 7173	10.0i		c	9.5
b	9.7		am 8405	9.7
c	9.6		b	9.5
am 7179	9.9i		c	9.5
b	9.6		am 8425	9.6
c	9.5		b	9.5
am 7609	10.1		c	9.5
b	9.7		am 8481	9.7
c	9.6		b	9.4
am 7662	9.7		c	9.5
b	9.7			
c	9.6			

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215

Thurs. Aug 3, 1916

R Sagittae

measures repeated		Sat top	
am 9111	tp	AC 17407	tp
am 9199	10.4?	AC 16983	9.7
	9.5		9.4
	9.6	AC 16696	9.5
am 9234	10.4	AC 16696	9.9
	9.5		9.4
	9.5		9.5
am 9258	10.1?	AC 16597	10.3
	9.5		9.4
	9.5		9.5
am 9287	9.7	AC 16321	9.8
	9.5		9.5
	9.6		9.5
am 9338	10.2	am 6141	9.5
	9.5		9.4
	9.5		9.4
am 9435	9.7	AC 16400	9.8
	9.4		9.5
	9.5		9.5
am 9583	10.2?	AC 16560	9.7
	9.3	AC 16648	tp
	9.5	AC 16787	10.2
AC 14150	10.0?		
		AC 16929	9.6
AC 17631	9.7		9.6
	9.4		9.5
	9.5	AC 17059	9.7
			9.4
			9.5

Thurs Aug 3, 1916

R Sagittae

measures repeated		Sat top	
AC 17471	tp	AC 15510	10.2
AC 17632	10.0		9.5
			9.6
am 11097	9.7	AC 15513	10.0
	9.5		9.4
	9.5		9.5
am 10849	10.3	AC 16424	10.0
	9.4		9.4
	9.5		9.5
am 10828	9.9?	AC 16642	tp
	c	AC 15213	10.6?
am 10800	9.9		9.4
	c		9.5
am 10003	10.0?	AC 15275	9.6
	c		9.4
AC 15310	9.7		9.6
	9.5	AC 11141	9.5
	9.5		9.4
AC 15397	9.6		9.5
	9.5	AC 11755	10.1
	9.6		9.6
AC 15442	9.7		9.5
	9.4	AC 11804	tp
	9.5	AC 11969	9.5
AC 15452	9.8		9.4
	9.4		9.5
	9.5	AC 12074	10.1
			9.4
			9.5

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Thurs Aug 3, 1916

2,30

R Sagittae

	Measures	Repeated	Sat Top
ac 12126	10.1	✓	
✓ b	9.6		
c	9.5		
ac 12419	9.6	✓	
✓ b	9.6		
c	9.5		
ac 12598	9.6	✓	
✓ b	9.5		
c	9.5		
ac 12631	9.6	✓	
✓ b	9.6		
c	9.5		
ac 12806	9.5	✓	
✓ b	9.5		
c	9.5		
ac 13227	9.7	✓	
✓ b	9.4		
c	9.5		
ac 13302	10.3	✓	
✓ b c			
ac 14210	10.3	✓	
✓ b	9.4		
c	9.5		
ac 14216	10.1	✓	
b	9.5		
✓ c	9.5		
ac 14222	10.0	✓	
✓ b o c			
ac 14240	9.5	✓	
✓ b	9.5		
c	9.6		
ac 14281	11.0 f	✓	
✓ b o c			
ac 14394	10.1?	✓	
✓ b o c			
ac 14618	10.1	✓	
✓ b o c			
ac 11022	9.7	✓	
✓ b	9.5		
c	9.5		
ac 11019	9.7	✓	
✓ b	9.6		
c	9.5		
ac 10818	ns7	10.9	✓
✓ b	9.7		
c	9.5		
ac 10894	9.7	✓	
✓ b	9.7		
c	9.5		
ac 10965	10.1	✓	
✓ b	9.6		
c	9.5		
ac 10952	9.6	✓	
✓ b	9.5		
c	9.5		

Thursday Aug 3, 1916

R Sagittae

	Measures	Repeated	Sat Top
ac 10988	9.6	✓	
✓ b	9.5		
c	9.5		
am 4573	9.9	✓	
✓ b	9.6		
c	9.5		
am 4603	10.3?	✓	
✓ b	9.5		
c	9.5		
am 4652	ns7	10.5	✓
✓ b	9.9		
c	9.5		
am 4697	9.6	✓	
✓ b	9.6		
c	9.5		
am 4929	10.2	✓	
✓ b	9.5		
c	9.5		
am 4948	10.0	✓	
✓ b	9.6		
c	9.5		
am 4990	9.6	✓	
✓ b	9.6		
c	9.5		
ac 8898	9.7	✓	
ac 8976	Xp	✓	
ac 9059	9.7	✓	
ac 9529	10.1?	✓	
✓ b	9.6		
c	9.6		
ac 9535	10.0	✓	
✓ b	9.5		
c	9.5		
ac 9590	9.7	✓	
b	9.7		
✓ c	9.5		
ac 9694	9.6	✓	
✓ b	9.7		
c	9.5		
ac 9730	9.8	✓	
✓ b	9.6		
c	9.5		
ac 9813	9.5	✓	
✓ b	9.6		
c	9.5		
ac 9857	9.9	✓	
✓ b	9.6		
c	9.5		
ac 9866	10.0	✓	
✓ b	9.6		
c	9.5		
ac 9920	Xp	✓	
ac 10009	ns7	10.5	✓
✓ b	9.4		
c	9.6		

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Thursday Aug 3, 1916

2,50

R Sagittae

	Measures		Expected	S at top		
AC 10751		10.2	q	AC 7993	9.6	
	h	9.5		h	9.8	
	c	9.5		c	9.5	255
AC 10668		+ p				
AC 10670		9.7				
	h	9.7				
	c	9.5				
AC 10750		9.7				
	h	9.6				
	c	9.5				
AC 8596		9.6				
	h	9.5				
	c	9.5				
AC 8704		9.7				
	h	9.8				
	c	9.5				
AC 8798		10.1				
	h	9.9				
	c	9.5				
AC 7825		9.7				
	h	9.8				
	c	9.5				
AC 7840		9.6				
	h	9.5				
	c	9.4				
AC 8012		9.6				
	h	9.5				
	c	9.5				

E.E.W.

Tuesday March 27, 1917

Examination of Plates AC 18703 and AC 18704
For Mr. King

Plate AC 18703

Circle of good definition - An ellipse 95 mm × 105 mm. Images very sharp in centre. Deteriorate rapidly towards edge. Images too small and sharp to measure satisfactorily

Plate AC 18704

Ellipse of good definition 125 mm × 135 mm
Images not quite so sharp as AC 18703

The difference between the two plates seems to be due principally to difference of focus. Plate AC 18704 is apparently taken slightly inside of the focus, so that the smallest images are not at the centre of the plate.

AC 18704 is much better than AC 18703 but not much so this due to difference in lens. I think it almost wholly due to focus

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Monday April 9, 1917

Corrections for Distance - H Plates

H 1506. Praesepe

Bright images measured with scale for Draughtsboard.

Stn	Exp. 1 Scale	d	Distance mm	2 Scale	dist. mm	3 Scale	Dist.	4	Dist
1 = a	193	134	130	215	242		7 m	275 15 230	16 m
3 b	230	144	144	210	225		12 m	250 35 215	21 m
4 c	215	85	65	220	242		18 m	260 25 235	27 m
5 d	248	205	205	220	193	55	55	218	5 m
6 e	212	54	54	220	193		14 m	240 25 215	24 m
9 f	205	48	48	176	212		15 m	230 35 195	25 m
7 g	193	17	15	193	192		6 m	232 37 200	16 m
8 h	205	158	130	212	200 20 180		10 nl	220 15 205	18 m
h²	215	228	205	225 200	240 40 170		40 m	tp	
11 K'	150	45	45	145	168		15 m	205 35 170	25 m
K²	177	238	238	212 80 162	tp		-	tp	
12 l	150	80	80	142	157 17 145		15 m	170 25 145	25 m
13 m	157	74	74	152	Sup.		-	165 170 Sup.	
14 n'	147	45	45	152	178 13 165		18 m	190 30 160	28 m
n²	158	195	195	Sup.	Sup.		-	tp	
16 0	137			155	185 65 120		21 m	205 50 155	21 m
15 p	162	174		159	138		22 m	170	12 m
17 q	161	194		158	153		12 m	178 38 140	19 m
18 r	160	184		148	150		7 m	170 35 135	15 m
W	117	134		152 27 130	165 35 130		31 m	tp	
X	192	51		205	240 47 193		24 m	243 38 205	34 m
2 = y	200	161		195 15 180	Sup.		-	260 32 228	32 m
z	120	100		143	168 53 115		29 m	tp	

Tuesday April 10, 1917

11 15

Corrections for Distance Cont.

H 1506 Praesepe Dysoniellus Cont.

Stn	Exp. 6 Scale	dist mm	Exp. 5	
1 = a	300 70 230	36	275 27 248	27
3 b	300 85 215	39	265 35 230	30
4 c	305 70 235	47	290 70 220	38
5 d	250 40 210	25	225 5 220	15
6 e	tp		265 47 218	34
9 f	tp		248 58 190	35
7 g	275 90 185	36	237 17 220	26
8 h	270 87 183	37	228 0 228	28
h²	Offedge		Offedge	
11 K'	tp		Sup.	35
K²	Offedge		Offedge	
12 l	tp		230 60 170	34
13 m	tp		Sup.	
14 n'	tp		228 58 170	38
n²	Offedge		Offedge	
16 0	tp		tp	
15 p	190 38 152	32	195 15 180	23
17 q	233 76 157	36	200 28 172	27
18 r	218 61 157	34	190 22 168	24
W	Offedge		tp	
X	"		tp	
2 y	"		290 70 220	42
z	"		tp	

11 45

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Tuesday Apr. 10, 1917

Corr. for Distortion Coat
H 1506 Dranidelis Coat

Expn. 1 Upright

		Scale		Dist.	Page 170 hor.	Mean Expn. 1 horiz.		hor.-axis
Star		horizontal	axis					
1 = a		255	230	13 S	255	255	00	25
3 = b		230	230	14 S R	230	230	00	0
4 c		210	205	6 S R	215	212	23	7
5 d		260	210	25 S	248	254	66	44
6 e		205	208	6 R	212	208	34	0
9 f		190	200	5 R	205	198	87	−2
7 g		205	200	14 S	193	199	66	−1
8 h		220	220	15 S l	205	212	87	−8
	h²	218	205	21 m l	215	216	21	11
11 K		152	140	5 S	150	151	11	11
	k²	210	190	25 m l	~~172~~ wrong line	~~194~~ 210	~~16~~ Or 17	20
12 l		143	140	7 S l	150	146	34	6
13 m		~~155~~ 149	147	7 R	157	158	11	9
14 n		143	146	5 l	147	145	22	−1
	n²	160	140	19 m l	158	159	11	19
16 o		145	140	2 m	137	141	44	1
15 p		178	150	17 L	162	~~167~~ 170	88	20
17 q		170	155	19 L R	161	166	45	11
18 r		168	140	18 S R	160	164	44	24
	N	135	120	13 m l	117	126	94	6
	X	190	190	5 m	192	191	11	1
2 y		205	205	9 l	200	202	32	−3
	y	118	120	10 m l	120	119	11	−1

+16 −35 −21 56 −56 23 +61 −14 +35

Corrections for Distortion.
Measures of Dranidelis on H 1506.

Exposures 1, 2, 3, and 4 were measured April 9, and Exposures 5 and 6 on April 10. Exposure 1 was re-measured on April 10 to guard against systematic errors. The ~~difference~~ systematic difference between the second and first measures is −0.28 and the average difference is ± 0.70. These differences are not large enough seriously to affect the combination of measures on the two days.

In the measures of April 10, besides the measure holding the scale horizontal, another measure was made holding the scale toward the center of the plate i.e. in the direction of elongation of images. This was also done on April 9, when the images did not appear on inspection to be round.

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Wednesday, April 11, 1917

Scale R 11.10

Corrections for Distance

H 1506

	Expl. 1 Sc 1	Sc 2	Expl. 2 Sc 1	Sc 2	Expl. 3 Sc 1	Sc 2	Expl. 4 Sc 1	Sc 2
a	2.8 3.1		3 3.4		3.8 4.1		3.6 3.9	
b	3.8 4.1		3.9 4.2		3.9 4.2		3.9 4.2	
c	3.9 4.2		4.0 4.3		4.0 4.3		3.1 3.4	
d	3.3 3.6		4.1 4.4		4.0 4.3		3.7 4.0	
e	4.1 4.4		4.0 4.3		4.0 4.3		3.8 4.1	
f	4.8 5.1		4.9 5.0		4.1 4.4		3.7 4.0	
g	4.0 4.3		3 3.8 4.1		4.3 4.6		4.0 4.3	
g'	4.0 4.3		3.8 4.1		4.1 4.4		3.9 4.2	
g2	3.9 4.2		5 5.0	4.9	4.9 5.2		* p	
K'	6.8 7.1	7.05 7.0 nearly sep req.	sup		5.5 5.8		5.2 5.5	
K2	5.7 6.0		sup		* p		* p	
l	6.8 7.1		sup		6.0 6.3		6.0 6.3	
m	6.8 7.1		6 6.8 7.1		sup		sup	
m'	6.8 7.1		6.0 6.35 6.3 6.40	6.5	5.9 6.2		5.9 6.2	
m2	7.1 7.4		sup		sup		* p	
o	7.0 7.3 7.20	7.1	6.9 7.0		6.8 7.1 7.05	6.8	6.9 7.2	
p	7.0 7.3 7.10	6.9	6.8 7.1 6.95	6.8	6.9 7.2 7.10	7.0	6.6 6.9 6.70	6.5
q	6.8 7.1 7.05	7.0	6 6.8 7.1 7.00	6.9	6.8 7.1 7.05	6.8	6.7 7.0 6.85	6.7
r	6.9 7.2 7.20	7.2	7.0 7.3 7.10	6.9	6.9 7.2 7.15	7.1	6.8 7.1 6.95	6.8
rr	8.7		7.8		8.8 q		* p.	
x	5.2 5.5		4.8 5.1		4.2 4.5		4.0 4.3	
y	3.2 3.5		sup		sup		3.0 3.3	
z	9.8		9.0 10.0?		9.8 q		* p	
α	10.1		10.2		9.9		10.5	
β	11.2		—		10.2 11.2?		10.9	

Wednesday, April 11, 1917

	Expl. 1 Sc 1	Sc 2	Expl. 2 Sc 1	Sc 2	Expl. 3 Sc 1	Sc 2	Expl. 4 Sc 1	Sc 2
γ	sup			11.1		10.0 11.0?		11.3
δ		12.2	sup			12.8?		13.1
ε	sup		sup		sup		sup	
ζ	~~12.6~~ ~~13.1~~			10.0	—		—	
η		13.1	sup		—		* p	
θ		13.6	n.s.		n.s.	12.6?		13.6 q
1		11.1		10.6	sup		* p	
2		11.6		11.0		10.8 11.8?		11.7
3		11.9		11.8 12.1	11.95			12.2 q
4	sup		—		—		—	
5		12.9	sup		sup		sup	
6		13.0		13.0	—		—	
7		13.0	—			12.7		13.1

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Wednesday, April 11, 1917

Scale R

H 1506

	Expo 5 Sc1	Sc2	Expo 6 Sc1	Sc2
a	2.8 31		2 4 Xq 27	
b	3.0 33		~~2.8q~~ 31	
c	3.0q 33		+ p	
d	3.5p 35		2.8 31	
e	2.8q 31		+ p	
f	3.9 γ 4.0		+ p	
g	3.0 33		3.0q 33	
h'	3.1 34		3.0q 33	
h²	off edge		off edge	
k'	susp		+ p	
k²	off edge		off edge	
l	5.8 61		+ p	
m	susp -		+ p	
n'	+ p		+ p	
n²	off edge		off edge	
o	+ p		+ p	
p	5.8 61		6.7 q 60	
q	6.2 65		+ p	
r	6.7 70		6.9 q 72	
w	+ p		off edge	
x	+ p		off edge	
y	3.7 γ 4.0		+ p	
z	+ p		off edge	
ζ		12.0q	+ p	
β	susp		+ p	

Wednesday, April 11, 1917

	Expo 5 Sc1	Sc2	Expo 6 Sc1	Sc2	Distances Exp.1 2 3 4 5 6
					~~143l~~
γ	11.8q		+ p		45l 11l 15nl 22nl 32
δ	+ p		off edge		14nl 23
ε	+ p		off edge		9nl 18
ζ	n.s.		+ p		5 8l 14
η	off edge		off edge		18nl 28nl
θ	+ p		+ p		17l 17nl
1		12.2q	+ p		8l 12nl 20nl 30nl 40
2		11.8	12.8q		11 2l 9l 15nl 23 34 44
3		13.0	+ p		3l 11nl 20nl 30 40
4	—		—		-
5	susp		+ p		-
6	n.s.		+ p		4l 10nl 19nl 29
7	+ p		+ p		11 2l 5l 11nl 20

12.00

α					13 3l 12l 18nl 26nl 34 -
β					14 2l

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2.40

Wednesday, April 11, 1917

Scale A I

Correction for Distance.

First use of Sc. Ad.

Measuring Machine # 1506 Praesepe

	V	H	Sc.	V	Diff. Cols V	Diff. Cols H
Zone 2 ✓	1379	1512	5.9 5.2	29 1368	-21	+144 291
✓	1435	1509	10.1	26 1409	+17	288
✓	1431	1506	6.6	38 1393	+13	285 88
✓	1405	1507	12.1	46 1359	-13	286 89
✓	1404	1506	12.0	44 1360	-14	285 88
✓	1394	1485	4.3 6.6	26 1368	-24	264 67
✓	1392	1484	10.0	26 1366	-26	263 66
✓	1426	1486	12.2	44 1382	+8	265
✓	1426	1481	11.9	43 1383	+8	260
✓	1403	1477	9.5	33 1380	-15	256
✓	1403	1471	12.0	44 1359	-15	250
✓	1397	1470	5.3 6.0	31 1366	-21	249
✓ star p	1415	1451	0.9 1.6	-13 1427	-3	230
✓	1420	1442	2.9 3.0	05 1415	+2	221
✓	1394	1442	6.1	38 1356	-24	221
✓	1436	1438	7.8 8.5	56 1380	+18	217
✓	1430	1432	1.2 1.9	-10 1440	+12	211
✓	1417	1429	1.3 2.0	-9 1426	-1	208
✓	1412	1428	4.2 5.0	20 1392	-6	207
✓	1388	1425	10.2	33 1358	-30	204
✓	1387	1422	11.9	42 1345	-31	201
✓	1356	1418	11.0	35 1307	-32	197
✓	1429	1422	1.8 1.1	16 1413	+11	201
✓	1441	1426	11.0	34 1407	+23	205
✓	1429	1420	11.9	43 1386	+11	199
✓	1395	1413	5.2 5.9	31 1364	-23	192
✓	1428	1412	5.6 6.3	32 1396	+10	191
✓	1434	1411	9.0	17 1419	+16	190

Wednesday, April 11, 1917

Scale A I

Measuring Machine # 1506

	V	H	Sc	V		
✓	1402	1410	10.8	32 1370	-16	+189
✓	1437	1403	13.2	54 1383	+19	182
dbl? ✓	1424	1401	12.1	47 1377	+6 dbl	180
✓	1415	1396	13.2	54 1361	-3	175
?	1402	1400	13.0	54 1368	-16	179
✓	1414	1395	11.0	35 1379	-4	174
?	1389	1381	7.8	1 1388	-29	160
✓	1410	1372	1.1 1.6	-10 1420	-8	151
✓	1391	1372	8.8	14 1377	-27	151
✓	1398	1378	B		-21	157
✓	1400	1378	9.1	15 1386	-18	157
✓	1408	1387	B		-10	166
✓	1394	1375	7.9	1 1387	-24	154
✓	1395	1371	5.1 5.8	30 1365	-23	150
✓	1428	1382	B		+10	161
✓	1426	1373	B		+8	152
✓	1424	1372	B		+6	151
✓	1419	1363	B		+1	142
✓	1416	1360	B		-2	139
✓	1433	1361	B		+15	140
✓	1448	1360	9.8	22 1426	+30	139
✓	1406	1353	10.2	25 1381	-12	132
✓	1396	1350	10.7	31 1365	-22	2 149
✓ star p	1412	1348	1.9 2.6	-3 1415	-6	127
?	1393	1340	7.6	00 1393	-25	119
✓	1417	1340	3.1 3.5	4 1413	-1	119
✓	1442	1347	B		+24	126
✓	1433	1338	8.3	07 1426	+15	117

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Wednesday, April 11, 1917

Scale a 2

Measuring machine H 1506

	V	H	Sc	V		
✓	1425 41	1335	11.7	1394	+17	+114
✓	1428 01	1323	3.3 2.6	1427	+10	112
✓	1409 17	1331	4.6	1372	-9	110
✓	1432 -01	1340	6.7	1433	+14	119
mean Enlarged abm	~~1405~~	~~1333~~	~~6.8~~	~~1433~~	~~+10~~	~~+12~~
✓	1430 23	1327	5.4 4.7	1407	+12	106
✓	1437 29	1327	10.6	1408	+19	106
✓	1427 42	1325	10.9	1385	+9	104
✓	1425 43	1316	11.8	1382	+7	95
✓	1426 43	1312	11.9	1383	+8	91
✓	1400 24	1306	9.8	1376	-18	85
✓	1426	1301	sup		+8	80
✓	1411 24	1295	9.9	1387	-7	74
	1430 44	1296	12.1	1386	+12	75
✓	1408	1286	B		-10	65
✓	1394	1280	B		-24	59
✓	1388 12	1280	8.9	1376	-30	59
✓	1399 35	1275	5.5 5.8	1355	-28	54
✓	1394 30	1274	5.9 5.2	1364	-24	53
	1397 13	1274	8.6	1384	-21	53
✓	1406 34	1278	10.9	1372	-12	57
✓	1429 20	1282	9.7	1409	+11	61
✓	1427	1278	B		+9	57
✓	1420	1272	B		+2	51
✓	1425	1270	B		+7	49
✓	1412	1266	B		-6	45
✓	1414 23	1265	5.4 4.9	1391	-4	44
✓	1416	1262	B		-2	41

Wednesday, April 11, 1917

Scale a 2

H 1506

	V	H	Sc	V		
✓	1446	1262	7.9 03	1443	+28	+41
✓	1422	1253	11.5 37	1385	+4	+32
✓	1394	1252	10.6 28	1366	-24	31
✓ starp	1410	1242	3.4 03	1407	-8	21
✓	1440	1243	3.4 04	1436	+22	22
✓	1416	1238	4.6 5.3 14	1402	-2	17
✓	1426	1236	3.7 06	1420	+8	15
✓	1431	1236	7.8 04	1427	+13	15
			06 7.9 48	1383		
✓	1428	1233	11.3 37	1391	+10	12
✓	1435	1232	11.8 43	1392	+17	12
✓	1436	1232	10.4 27	1469	+18	11
✓	1403	1232	3.3 4.0 09	1394	-15	11
✓	1406	1227	5.3 5.0 20	1386	-12	6
✓	1445	1232	7.4 02	1449	+27	11
			14 6.7 36	1409		
✓	1446	1223	6.2 07 30	1416	+28	2
mean of center	1418	1221			0	0
✓	1393	1217	10.7 32	1361	-25	-4
✓	1404	1211	9.1 17	1387	-14	-10
✓	1438	1211	11.8 40	1398	+20	-10
✓	1435	1208	12.7 51	1384	+17	-13
✓	1400	1203	9.7 23	1377	-18	-18
✓	1402	1202	11.9 43	1389	-16	-19
✓	1419	1197	11.0 34	1385	+1	-24
	1422	1200	12.0 45	1377	+4	-21
✓	1427	1192	11.7 39	1388	+9	-29
✓	1408	1191	9.6 19	1389	-10	-30

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Wednesday, April 11, 1917

Scale A 7

H 1506

	V	H	Sc	V		
	V	1406	1188	B	-12	-33
v.	✓	1427	1182	8.2 05	+9	-39
✓	dfg	1434	1183	11.2 34 1400	+16	-38
	✓	1446	1183	13.1 52 1393	+28	-38
	✓	1446	1178	9.4 19 1427	+28	-43
v.		1427	1178	B	+9	-43
	✓	1423	1180	10.7 30 1393	+5	-41
	✓	1415	1181	10.3 28 1387	-3	-40
	✓	1405	1180	10.2 29 1376	-13	-41
2.	✓	1387	1181	8.4 10 1377	-31	-40
				07 7.7 53 1334		
	✓	1393	1178	B	-25	-43
2.		1406	1177	3.6 8.9 06 1400	-12	-44
2.		1387	1175	7.2 -03 1390	-21	-46
				12 6.7 36 1351		
	✓	1404	1172	9.7 21 1383	-14	-49
	✓	1425	1169	B	+7	-52
	✓	1416	1167	B 9.5 4.3 8.8 17 1398	-2	-54
	✓	1415	1167		-3	-54
	✓	1394	1158	10.6 20 1374	-24	-63
	✓	1445	1160	7.2 -3 1448	+27	-61
				-5 8.4 52 1393		
	✓	1420	1154	11.3 39 1381	+2	-67
	✓	1430	1152	13.2 55 1375	+12	-69
2.	✓	1403	1157	9.8 22 1381	-15	-64
	✓	1393	1148	10.1 27 1367	-25	-73
	✓	1400	1147	9.7 21 1379	-18	-74
	✓	1389	1145	8.2 -3 1398	-29	-76

Wednesday, April 11, 1917

Scale A 2

H 1506

	V	H	Sc	V		
				05 7.4 44 1345		
✓	star p	1409	1143	2.9 01 1405	-9	-78
	✓	1437	1147	3.5 02 1435	+19	-74
	✓	1413	1140	4.7 16 1397	-3	-81
2		1403	1136	4.5 15 1388	-15	-85
	✓	1394	1137	11.9 44 1350	-24	-84
	✓	1445	1136	6.7 38 1407	+27	-85
2.		1437	1136	10.7 31 1406	+19	-85
	✓	1432	1136	11.9 43 1389	+14	-85
	✓	1431	1135	7.1 42 1389	+13	-86
	✓	1426	1133	11.9 45 1381	+8	-88
	✓	1435	1131	3.8 11 1414	+37	-90
	✓	1406	1125	4.9 21 1385	-12	-96
	✓	1393	1129	12.9 56 1337	-25	-92
	✓	1445	1125	5.7 26 1419	+27	-96
	✓	1418	1112	13.2 57 1361	0	-109
	✓	1422	1112	12.3 48 1374	+4	-109
2.	2	1429	1115	12.6 44 1385	+11	-106
	✓	1433	1114	13.2 57 1376	+15	-105
	✓	1432	1114	13.3 56 1376	+14	-107
2.		1439	1110	12.0 44 1395	+21	-111
	✓	1436	1108	9.2 19 1417	+18	-113
	✓	1411	1108	6.6 31 1380	-7	-113
	✓	1396	1105	10.6 30 1366	-22	-116
	✓	1401	1105	11.7 40 1361	-17	-116
	✓	1391	1099	8.7 12 1379	-27	-122
	✓	1404	1092	B	-14	-129
	✓	1423	1083	B	+6	-138

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Wednesday, April 11, 1917

Scale A7

H 1506

		V	A	Sc V			
	?	1425	1080	10,1	25 1400	+7	-141
	?	1445	1081	10.6	24 1421	+27	-140
	✓	1413	1079	10,0	26 1387	-5	-142
dubl?	?	1385	1083	8.7	12 1373	-33	-138
	?	1385	1082	8.3	19 1376	-33	-139
dub.	✓	1413	1080	9.8	23 1390	-5	-141
	✓	1392	1078	B		-26	-146
	✓	1402	1078	9.6	21 1381	-16	-143
	?	1395	1076	7.8	03 1392	-23	-145
	✓	1421	1068	B		+3	-153
	✓	1421	1063	sup		+3	-158
	✓	1393	1064	8.6 (6.3)	32 1361	-25	-157
	✓	1402	1066	9.3	20 1382	-16	-155
	✓	1437	1057	13.6	54 1383	+19	-164
	?	1443	1056	7.1 (+06)	00 1413 7.7 47 1396	+25	-165
	✓	1418	1052	11.4	38 1380	0	-169
✓	star p	1407	1050	9.7 (34)	04 1403	-11	-171
	✓	1398	1049	9.7	22 1376	-20	-172
	✓	1414	1043	9.2 (38)	11 1403	-4	-178
	✓	1453	1043	11.9 (46)	15 1438	+35	-178
	?	1454	1037	9.9 (36)	08 1446	+36	-184
	✓	1436	1041	12.8	51 1385	+18	-180
dbl	✓	1337	1041	12.8	53 1384	+19	-180
	✓	1431	1038	12.3	47 1384	+13	-183
	✓	1426	1037	12.2	50 1376	+8	-184
	✓	1419	1036	12.1	46 1373	+1	-185
	✓	1435	1038	9.9	23 1412	+17	-183

Wednesday April 11, 1917

Scale A7

H 1506

		V	A	Sc V			
		1436	1034	11.8	41 1395	+18	-185
	✓	1427	1035	5.1	66 34 1393	+9	-186
	✓	1399	1034	3.4	48 14 1385	-19	-187
	✓	1403	1027	4.1	18 1385	-15	-194
	✓	1392	1035	11.8	44 1348	-26	-186
	?	1389	1032	12.4	48 1341	-29	-189
	?	1444	1028	4.6 (5.3)	23 1421	+26	-193
	?	1426	1019	13.0	53 1373	+8	-204
	✓	1358	1016	4.9	23 1365	-30	-205
	?	1393	1010	8.6	10 1389	-19	-211
				(08 8.3)	51 1348		
	✓	1407	1010	6.1	29 1378	-11	-211
	?	1396	1009	10.3	28 1365	-22	-212
	✓	1404	1008	7.5	02 1406	-14	-213
				(03 7.7)	46 1358		
	?	1399	1001	11.6	40 1359	-19	-220
	✓	1389	1001	7.7	02 1387	-29	-220
				(+07 7.7)	47 1342		
	✓	1433	993	8.7	11 1422	+15	-228
				(+07 8.7)	57 1376		
	✓	1406	991	10.2	26 1380	-12	-227
	✓	1402	989	6.6	40 1362	-16	-232
	✓	1423	981	7.5	03 1426	+5	-234
				(11 7.0)	38 1385		
	✓	1411	978	9.9	24 1387	-7	-243
		1381	975	B			-243
	✓	1390	978	B		-28	-243
	✓	1393	978	9.0	15 1378	-25	-243

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Wednesday, April 11, 1917

Scale A 7

	V	H	Sz		Diff Centre	
					H 1506	
✓	1412	976	12.2	1384	-6	-245
	1425	980	5.9	1388	+7	-241
✓	1419	975	B		+1	-246
	1393	969	5.7	1359	-15	-252
✓	1401	967	10.4	1372	-17	-254
	1440	957	8.5	1432	+22	-264
			8.5	1386		
✓	1436	955	12.9	1384	+18	-266
	1413	957	10.8	1379	-5	-270
✓	1418	950	11.0	1384	0	-271
centre	1415	1221			0	0

221 settings in 75m

178 an hour.

3.55

Mean centre	1418	1221
Differences fr	3	103
	2	106
	1	99
	2	93

Friday, April 20, 1917

A Session 15. MN Plates.

Circles of Best Definition on Plates

Measured by M. E. O. K Book 20

MN 2612 diameter 20 x 23 mm

Centre very near centre of Plate + centre of cluster

2592	16 x 16	Centre near centre of plate + cluster
2613	16 x 16	" " " " " "
2602	~~11~~ x ~~27~~	" " " " " "
2619	25 x 23	" " " " " "
2604	30 x 25	Centre about 5 mm south of and preceding centre of plate
~~2582~~	~~20 x~~	
2582	20 x 20	Centre about 5 mm directly south of centre.
2588	15 x 15	Centre near centre of plate and cluster

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Saturday, April 21, 1917

Miskin 15 MM Plates

Distances from Centre of Prod. Def.

	MM 2604 mm	MM 2582 mm	MM 2602	
a	42	~~38~~44	29	Measures of
b	19	14	14	distance on
c	41	~~38~~44	28	MM 2602 are
d	44	41	39	made from
e	24	29	26	centre of plate
f	24	29	28	
g	11	15	12	
h	1	6	6	
k	6	8	11	
a	12	13	8	
b	14	12	8	
c	1	6	7	
d	10	12	6	
e	2	7	6	
f	6	2	8+0	
g	5	10	10	
h	4	9	9	
k	10	5	6	
l	6	2	8	
m	7	3	9	
n	9	5	11	
o	11	7	13	
p	11	9	15	
q	9	7	12	
q'	5	3	8	
r	6	4	10	
s	7	3	9	

Monday, April 23, 1917

Praesepe Brick Plates 2060 and 2064

Distances of Stars means for Corr for dist.

Dist	Adopted Dist	1	2	3	4	5	6	7	8	9	10	11	12
		~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	~~9~~	~~10~~	~~11~~	~~12~~
		1	2	3	4	5	6	7	8	9	10	11	12
a		-24	-25	-26	~~-27~~ -28	-28	-30	-30	-25	-22	-19	-15	-13
b		-25	~~-26~~ -27	~~-27~~ -28	~~-28~~ -29	~~-29~~ -30	~~-30~~ -31	-31	~~-35~~ -37	-28	~~-25~~ -25	-21	-20
c		14l	14	15l	16	16	-17	-18	16l	13	12l	~~12~~ -20	~~13~~ +13l
d		-46	-42	-44	-45	-48	-48	-48	-44	-40	~~-37~~ -40	-34	-30
e		-13	-14	-15	-16	-17	-18	-18	-15	-12	-9	-6l	5l
f		-11	-12	-13	-14	-15	~~-16~~ -17	~~-16~~ -17	-14	-10	-8	-4l	+4l
g		-25	-26	-27	-28	-29	-30	-30	-27	-23	-20	-17	-13
h		-25	-26	~~-26~~ -27	-29	-30	-31	-31	~~-27~~ -28	-24	-20	-17	-14r
k	d												
K		-12	-13	-14	-15	-16	-17	-17	-14	-11	-8l	-6l	+6l
K	d												
l		-13	-14	-15	-16	-17	-18	-18	-14	-11	-8r	-5r	4r
m		-14	-15	-16	-18	-20	-21	-21	-17	-13	-10	-6	-2
n		-6	-7	-8	-9	-10	-12	-12	-8	-5	-2r	+2r	+5r
o		2	-3	-4	-5	-6	-7	-7	-4	3l	+5l	+8l	~~+11~~ +11r
p	d												
q	d												
r	d												
s	d												
t	d												
u	d												
β	w	+15	+14	+14	+13	+12	+11	+10	+13	+16	+19	+22	+26
	x	+6l	+5l	4l	4l	4l	-5l	-6l	5l	+7l	+10	+13	+16
	y	-10r	-11r	-11r	-12r	-12r	-13r	-13r	-11r	10r	+10r	+12r	+14r
γ	z	+14	+13	+12	+11	+10	+9	+10	+12	+14	+17	+21	+25
δ	v	+11r	+10r	+9r	+9r	+8r	8r	9r	+9r	+11r	+14	+17	+20

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L 2460 Distances Cont.

Des used		1	2	3	4	5	6	7	8	9	10	11	12
	α	+13	+12	+11	+9	+8	+7	+7	+11	+14	+18	+21	+25
	β												
	γ	4r	4r	4r	5r	-5r	-6	-6	3r	4r	+7	+10	+13
	δ	~~+17~~	4r	-5r	-6r	-7r	-8r	-7r	-5r	4r	+6	+9	+12
	ε	+6r	6	6r	6	-6r	-7r	5r	+7r	+9	+12	+14	+15
	ζ	+9r	8r	8r	9r	-10r	-10r	8r	+9r	+11	+14	+17	
	η	-16r	-17	-18	-19	-20	-22	-22	-19	-15	-12	-8	-4
	θ	-16l	-18	-19	-20	-21	-22	-22	-19	~~-16~~ ~~+15~~	~~-14~~ ~~+13~~ l	-11	-10 l
	ι	-26	-27	-28	-29	-30	-32	-32	-28	-25	-22	-19 ~~-22~~	-15 l
	λ	+9l	+8l	+7l	7l	7l	7l	8l	+7l	+10l	+13	+16	+19l
	κ	+14l	+14l	+13l	+12l	+11l	+10l	+10l	+13l	+15l	+18	+21	+24l
	ν												
	π	+11	+10	+9	+8	+6	+5	+5	+8	+12	+15	+18	+21
	ρ	+12	+10	+9	+8	+7	+6	+6	+10	+13	+16	+19	+22
	σ												
	τ	-2	-3	-4	-5	-6	-8	-8	-4	2l	+3	+7	+11
	φ	-13	-14	-15	-16	-17	-19	-19	-16	-12	-9	-5	-1
	χ												
	ψ	2r	1	-4	-5	-6	-7	-7	-4	1r	+4	+7	+11
	ω	3r	-4r	-4r	-5r	-6r	-8	-8	-4r	3r	+5	+8	+12
	1												
	2	-27	-28	-29	-30	-31	-32	-32	-29	-26	-22l	-20l	-17l
	3	d											
	4	d											
	5	d											
	6	d											
	7	d											
	8	d											

Monday April 23, 1917

L 2464 Distances

Des used	Des	1	2	3	4	5	6	7	8	9	10	11	12	13
	a	-25r	-25r	-21	-16	-12r	-10r	-10r	-12r	-16r	-21	-25r	-30	-34
	b	-21	-21	-16	-11	-7	3l	2l	-7	-11	-16	-21	-25	-30
	c	-8r	-8r	-4r	3r	+7	+12	+12	+7	4r	-5r	-8r	-12	-17
	d	~~-43~~ -25r	~~-43~~ -25r	-38 -34r	-30r	-25r	-25r	-30r	-34r	~~-38~~ -24r	-43r			
	e	~~-16~~ ~~-15r~~	~~-16~~ ~~-15r~~	~~-14~~ ~~-14r~~	11r	11r	+12r	+12r	11r	11r	~~-14~~ ~~-13r~~	~~16~~ ~~-15r~~	-20	-24
	f	-15r	-15r	-13r	11r	12r	+14r	+14r	12r	11r	~~-13~~ ~~-12r~~	-15r	-19	-23
	g	-27r	-27r	-23	-19r	-16	-13r	-13r	-16	-19r	-23	-27r	-32	-36
	h	~~-33~~ -33r	-33r	-30	-27r	-25r	22r	23r	-25	-27	-30	-33	~~-36~~	~~-40~~
	k	d												
	k'	-14r	-14r	10r	9r	+10r	+12r	+12r	+10r	9r	10r	-14r	-18	-22
	k²	d												
	l	~~-23~~ -23r	-23r	-21	19r	19r	20r	20r	20r	-21r	-23r	-26r	-29r	
	m	~~-20~~ -20r	-17r	-14r	13r	+14r	+15r	14r	-15r	-18r	-20r	-24r	-28r	
	n	~~-18~~ -18r	-17r	+17r	~~+18~~ +17r	~~+20~~ +19r	~~+21~~ +15r	~~+19~~ +18r	+18r	-17r	-18r	~~-20~~ ~~-14r~~	~~-23~~ -17r	
	o	11r	11r	12r	+14	+18	+21	+21	+18	+14	12r	11r	-14r	-17r
	p	-32	-32	-27	-22	-17r	-14r	-14r	-17r	-22	-27	-32	-36r	-41r
	q	-28l	-28l	~~-23~~ 19l	-15l	-11l	-10l	-15	-19l	-23	-28l	-32	-37l	
	r	-30	~~-30~~ ~~+5~~	-25	-20	~~-15~~	~~-10~~	~~-10~~	-15	-20	-25	-30	-35	-40
	s	d												
	t	d												
	u	d												
	w													
	x	+10r	10r	+12r	+16	+20	+24	+24r	+20	+16	+12r	10r	11r	-12r
	y	~~25r~~	25r	+24r	+25	25r	~~+25~~ +25r	~~+25~~ +25r	25r	+26	+25r	25r	-27r	-29r
	z													
	Σ	2	+23r	+23r	+25r	+27	~~+30~~ +27r	~~+33~~ +30r	~~+33~~ +30r	~~+30~~ +27r	~~+27~~ +25	+25	+23r	23r

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Adjst Dec

Dec Mod L 2464 Cont

		1	2	3	4	5	6	7	8	9	10	11	12	13
	α													
	d	+~~18~~ 20	+~~18~~ 20	+~~22~~ 24	+~~26~~ 28	+30	+34	+34	+30	+26	+22	+18	+15	+14
W =	β	d												
	γ													
	δ	19	19	19	+20	+23	+26	+26	+23	+20	19	19	20	-21
	ε	20	20	21	+23	+26	+29	+29	+26	+23	21	20	20	-22
	ζ	23	23	+24	+~~26~~ 27	+27	+30	+30	+27	+~~27~~ 24	+24	23	23	-24
	η	-21	-21	-19	-16	15	15	15	-15	-16	-19	-21	-26	-31
	Θ	-17	-17	-14	-10	6	+7	+7	6	-10	-14	-17	-26	-25
	κ	-26	-26	-21	-16	-11	-7	-7	-11	-16	-21	-25	-30	-35
	λ	+19	+19	+13	+15	+19	+24	+24 +19	+19	+13	+13	+19	6	-9
	μ	+11	+11	+15	+19	+25	+29	+29	+25	+19	+15	+11	+7	5
g =	ν	+13	+13	+17	+22	+26	+30	+~~26~~ 30	+26	+22	+17	+13	+10	7
	ξ													
	π	+16	+16	+20	+23	+27	+32	+32	+27	+23	+20	+16	+14	13
	ρ	+20	+20	+23	+26	+30	+34	+34	+30	+26	+23	+20	+19	18
ε =	σ													
	τ	13	~~13~~ 14	+14	15	+18	+21	+21	+18	+15	+14	13	-16	-18
	φ	d												
	χ													
	ψ													
	ω													
	1													
	2	-24	-24	-19	-14	-10	-5	-5	-10	-14	-19	-24	-28	-33
	3	-13	-13	-9	-4	+1	+6	+6	+1	-4	-9	-13	-18	-23
	4	-13	-13	-10	-8	-4	+4	+5	-5	-8	-10	-13	~~-15~~ -17	-22
	5	-2	-2	+3	+8	+13	+17	+17	+13	+8	+3	-2	-7	-11
	6	+2	+2	+7	+12	+17	+22	+22	+17	+12	+7	+2	-2	-7
	7	+7	+7	+11	+16	+21	+26	+26	+21	+16	+11	+7	~~+8~~ +3	-2
	8	+6	+6	+10	+15	+20	+25	+25	+20	+15	+10	+6	+2	-3

Monday, April 23, 1917.

The distances on Link plates 2460 and 2464, for Procyon were measured from the geometrical center of plate. The measures for γ 1 9 4 1 9 2 are made from center of circle of best definition. The link letter does not the same as those marked on the reference chart for Procyon.

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Wednesday, May 2, 1917

Scale M

Draniclis

Corrections for Distance. H1881 Praesepe

	Dec	Eph. 1	Eph. 2	Eph. 3	Eph. 4	Eph. 5	Eph. 6	Eph. 7	Eph. 8	Eph. 1	Eph. 2	
		(1)	(2)	(3)	(5)	(7)	(8)	(6)	(4)	(9)	(10)	(2)-(10)
Suggested for identification on H1502	a	208	230	228	238	250	250	278	307	232	228	2
	b	228	220	222	217	237	230	267	270	215	215	5
	c	203	210	228	230	253	278	g	g	200	218	8
	d	238	230	240	225	238	216	225	247	245	235	5
(Numbers in parentheses at heads of columns, in decimals refer to measurement)	e	188	190	204	210	238	ruf	g	g	193	196	6
	f	216	195	205	192	227	235	g	g	215	190	5
	g	182	191	188	188	200	223	237	255	187	190	2
	K	146	140	165	152	170g	190g	g		155	140	0
	m	132	137	125	138	150g	168g	g	g	138	130	5
	o	130	138	147	156g	165g	g	g	g	130	135	6
Remember meant if 5 figures and 1 and 2 at close if letting indicate small explanation effect on the wide will be very much known.	p	140	138	135	117	133	135	140	156g	140	140	2
	r	128	118	130	117	130	130	148	g	124	117	3
	X	200	192	203	239g	250g	g	g	g	182	190	5
	1	115	99	100	g	g	g	g	g	100	108	18
	2	65	92	95?	85?	70?	7	7	g	72?		
	3	ruf	75?	68?	19?	95?	7	7	g	ruf		
	4	50?	7	7	7	7	7	7	7	65?	15	
	5	60?	65?	7	7	7	7	7	7			
	6	7	7	7	7	7	7	7	7			
N.B. are discordant smaller than 120 are extremely uncertain.	7	7	7	7	7	7	7	7	7			
	8	48?	60?	7	7	7	7	7	7			
	9=25	70	75	82	80?	75	50?	78?	80	85	7	80 10 83 3
	11	115	114	118	118	113	98	120	117	125	139g	1132 118 6
	12	7	7	7	7	7	7	7	7	7		
	13	85	88	95	100	108	80	97	125 ruf	95?	90	5 90 10
	14	73	68	75	90	75	65?	66?	65?	95?	7	65 8 70? 10
	39a	7	7	75?	4		7	7	7	7		63-101 52-82 11 25

Wed. May 2, 1917

Distances

	Eph. 1	Eph. 2	Eph. 3	Eph. 4	Eph. 5	Eph. 6	Eph. 7	Eph. 8
	mm	mm	mm	mm	mm	mm	mm	mm
a	-10	-7	-1l	+5	+10	+16	+22	+28
b	-10r	-7r	6r	+9r	+14	+19	+25	+31
c	2r	+5r	+10	+15	+21	+27	+33	+38
d	-2	-1	-13	-7	-3l	+5l	+10	+16
e	-3/4l	3l	+7	+12	+18	+24	+30	+35
f	-3l	+3l	+8	+13	+19	+25	+31	+36
g	-11	-8	-4l	+5l	+10	+16	+22	+28
K	-3l	+2	+8	+13	+19	+25	+31	+36
m	-6l	5l	+7l	+11	+17	+22	+28	+33
o	+6l	+9	+14	+20	+25	+31	+37	+42
p	-14	-11	-5	1l	+6	+12	+18	+24
r	-14	-11r	-7r	5r	+8r	+14	+19	+25
X	+8	+11	+17	+22	+28	+34	+39	+45
g	+13	+16	+21	+27	+33	+39	+44	+50
1	6r	+7r	+12	+17	+23	+28	+34	+40
2	-6r	5r	+7r	+12	+17	+23	+29	+35
3	+4	+7	+13 +15	+18	+24	+30	+36	+42
4	+5r	+8		+19	+25	+31	+37	+43
5	3l							
6	+2							
7	-5							
8	-12	-9l	6l	+7l	+11l	+17	+22	+27
9=25	-11	-7	-2r	+4	+10	+15	+21	+27
11	-15	-11	-6	2l	+6	+12	+3 18	+24
12	-16	-12	-8	4l	+7r	+12	+17	
13	-17	-13	-9	6l	+7r	+11	+17	+23
14	-22	-18	-12	-7	-1	+5	+11	+16 × measby O'R
39a	+8r	+11	+17	+22	+28	+33	+38	
38a								

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Wed. May 2, 1917

Denniston Corr. for Dist. H 1881 Cont.

Dec	Exp. 1 (1)	Exp. 2 (2)	Exp. 3 (3)	Exp. 4 (5)	Exp. 5 (7)	Exp. 6 (8)	Exp. 7 (6)	Exp. 8 (4)	Exp. 1 (9)	Exp. 2 (10)	(2)-(10)
15	90	7	7	7	7	7	7	7	(1)(9) -		
16	7	7	7	7	7	7	7	7			
17	evp	116/112	125	100	105	88	98	97	evp	120	8
18	80 72	75	91	evp	65	80?	80?	58?	65? 15		
19	112 98	114/118	118	115/7	105	97	100	85?	85 27	110	8
20	g	7	7	7	7	7	7	7			
X 22	g	g	100	7	7	7	7	45?	-	-	
24	g	162/160	158	148	142	146	150	150	155g	165	5
25≥g	72 68	65?	72?	65?	74?	80?	80?	4	65? 7		
X 25≥	g	7	7	7	7	7	7	4	-		
27	123 116	114/117	117	115/7	130	126	135g	132	110 13	110	7
X 27≥ 28	7	7	7	7	7	7	7	7	7		
28	7	7	7	7	7	7	7	7	7		
30	88 86	104/105	88	102	100?	110?	88?	85?	85 3	102	3
31	75 68	87/72	68	60?	95?	70?	77?	evp	60? 15	82	10
32	108 103	117/110	105	130	145	147?	120? g	168	98 10	113	3
33	115 112	101/105	117	110	137	136?	120? g	135 6	108 7	97	8
34	f	58?	7	7	7	7	7	7	60?	7	
35	91 83	92/95	94	78?	95?	g	g	7	75? 16	88	7
36	100 98	115/120	112	128	107?	g	g	g	96 4	110	10
37	108 106	102/105	113	115	135g	140?	145?	120?	105 3	100	5
37a	7 75?	7	7	7	7	7	7	g	7/115	7	
38	X 75?	7	58?	7	7	7	7	7/150?	7/135	7	
39	7	7	7	7	7	7	7	4	4	7	
X 40	120 116	130/130	123	g	g	g	g	g	1137	130g	0
41	g	g	205	185	168	156	155	157	g	g	
42	g	7	80?	62	85	75?	70?	58?	g	g	
43	g	g	132	113	122	94	107	105	7 +36/11	7	58-16/12
44	g	g	215	195	187	95	182	198	7 +48	7	41 ±6

Wed. May 2, 1917

H 1881 Distances

Dec	Exp. 1	Exp. 2	3	4	5	6	7	8
		Exp. mm	mm	mm	mm	mm	mm	mm
15a	-17 mm	-15	-8	-3	+4	+9	+15	+21
16a	-18	-16	-9	-4	+2	+8	+14	+20
17	-25	-23	-17	-12	-6	1l	+6	+12
18	-25	-23	-17/-11	-11	-6l	4l	+8	+14
19	-25	-22	-18/16	-12	-7l	+6l	+10l	+15
20	-28	-25	-21	-15	-9	-3l	+3	+9
22	-33	-30	-25	-19	-14			
24	-24	-21	-15	-10	-5l	+4	+9	+14
25≥g	-11	-7	-2	+4	+10	+16	+21	+27
25≤	-22	-20	-16					
27	-11	-8	4	+6	+11	+17	+22	+28
27≥	-10l							
28	-11	-9	5	+7	+11	+16	+19/21	+24/27
30	-9	-8	-3l	+6	+12	+18	+23	+29
31	-5	-1	+5	+10	+16	+22	+27	+33
32	-3	2	+7	+12	+18	+24/2	+29	+34
33	-5	4	+7	+13	+18	+23/3	+29	+34
34	-3	1l	+6	+12	+18/17	+23	+29	+35
35	-7l	-6l	+6l	+11l	+16l	+21	+27	+32
36	+9	+12	+17	+23	+29	+34	+39	+45
37	-3l	3l	+7	+13	+18	+24	+30	+36
37a	+6l	+9l	+14	+18	+24	+30	+36	+42
38	-14	-12	-7	6	+8	+14	+19	+24
39	-14	-12	-8	6	+9	+15	+20	+25
40	+11	+15	+21	+26	+32	+38	+44	+50
41	-32	-28	-22	-17	-11	-5	+1	+7
42	-33	-28	-23	-17	-11	-5	1	+7
43	-30	-26	-20	-15	-9	-3	+4	+9
44	-30	-26	-20	-15	-9	-4	+4	+9

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Tuesday, June 5, 1917

Scale R

Corrections for Distance. Diffraction Images.
H 1506 Praesepe 2 min. exp. Grating up + down

	Exp. 1	2	3	4	5	6	7	8	Distances Exp. 1	2	3
	Order 3	(4)	(1)	(6)	(4)	(2)	(4)	(2)			
a	6.6 .70	6.6 6.9	6.2 .65	5.9 6.2	5.7 5.9	6.0			-11	-1	9
b	6.7 7.0	6.7 7.0	6.4 .67	6.1 6.4	g	g			-12	7	13
c	6.9 7.2	7.0 7.10	6.8 7.1	6.6 6.9	6.0 6.3	g			4	9	19
d	6.7 7.0	6.7 7.0	7.0 7.3	6.8 7.1	6.2 6.5	5.8 6.1	5.9 6		-23	-13	-3
e	7.8	7.5 7.8	6.9 7.2	6.8 7.1	g	g			-3	+7	+17
f	7.8	7.6 7.9	6.8 7.1	7.7 8.0	g	g			-2	7	17
g	7.5	7.7 8.0	7.7 dif.	7.1 7.4	6.9 7.2	g			-12	-3	8
k'	emp.	emp.	11.0	emp.	g	g			-5	+4 +1	+17
l	11.5	11.6 g	11.7	11.8 g	g	g			-7	+7	+16
m	11.2	11.8 11.9	emp.	emp.	g	g			-7	+3	
m'	11.0	10.9 g	11.7	11.7 g	g	g			5	+9	+18
o	11.8	11.8 g	12.0	12.1 g	g	g			+2	11	+21
p	11.7	11.8	11.6	11.7	12.0	12.8			-16	-6	+4
r	12.3	12.1	12.4	12.6	13.0 g	g			-16	-8	+8
x	8.0	7.8	emp.	g	emp.	g			6	16	26
13	m3	13.4	13.5	13.4?	emp.	m.s.			-17	-8	4
17	13.7	12.9 g	13.6	13.7	emp.	13.4			-28	-18	-8
19	13.5	13.2	13.1	13.1	emp.	13.8			-26	-16	-7
24	11.6	10.8	10.8	10.8	11.0 10.8	11.5			-26	-16	-7
27	12.7	12.5	13.0	13.1	13.6? g	g			-12	5	+10
30	13.6	13.3	13.2 13.8	14.0?	g	g			-10	4	+10
32	13.0	12.8	12.9	13.4	g	g			-5	+7	+16
33	13.4	13.0	13.1	13.5	g	g			-7	+8	+17
40 38	13.2	13.9?	g	g	g	g			+10	+20	+30
41 40	9.9 g	9.6	9.7	9.7	9.7	9.8			-38	-22	-13
43 47	13.5	12.7	12.9	12.8	12.8	12.9			-30	-21	-11
44 43 37	8.0	7.9	7.7	8.3	8.1 emp.	7.8			-30	-21	-11

Tuesday, June 5, 1917

Corrections for Dist. Cent. H 1506
Images h. grating right and left

	Exp. 1	2	3	4	5	6	7	8	Distances Exp. 4	5	6
	Order (4)	(2)	(6)	(1)	(5)	(3)					
a	6.2 .65	6.2 6.5	6.0 .63	5.9 6.2	5.1 5.4	g			19 21	29 31	39 41
b	6.2 .65	6.4 6.7	6.3 .66	6.0 6.3	g	g			21	31	41
c	6.2 .65	6.3 .66	6.0 .63	6.0 .63	g	g			29	39	49
d	6.5 .68	emp.	6.5 .68	6.7 7.0	6.3 .66	5.8 g. 6.1			17 23	27 33	
e	.7.1	7.1	.6.8	.7.0 g	g	g			+26	36	
f	.7.1	7.6	7.8 g	g	g	g			27	37	
g	.7.6	7.4	.7.2	6.9	.6.6	g			18	28	38
k'	emp.	emp.	11.4?	g	g	g				37	
l	11.0	emp.	11.7?	g	g	g			25	34	
m	11.4	11.5	emp.	g	g	g					
m'	11.5	11.4	11.3?	g	g	g			28	38	
o	12.0	11.9	12.0	g	g	g			31		
p	11.7	11.7	11.7	11.7	11.9?	12.8?			14	24	34
r	12.4	12.2	12.0	12.4	12.8 g	g			16	26	36
X	8.0	7.6?	7.6 g	g	g	g			36	46	
13	13.8	13.6	dif.	13.6	13.9	m.s.			13	23	
17	13.6	13.6	12.9	13.1	13.8	13.9?			+2	12	22
19	13.8	13.5 g	13.2	emp.	13.9	13.7			+8	+16	24
24	10.9	10.8	11.0	11.5	11.1?	11.8 g			+6	+16	26
27	13.0	12.7	12.6	12.8	13.2 g	g			19	29	39
30	13.9	13.7 13.8	dif.	13.7	g	g			20	30	
32	12.9	12.7	12.8	13.2	g	g			26	36	
33	13.4	13.0	13.1	13.5	g	g			26	36	
40 38	13.9	g	13.1 g	g	g	g			40	50	60
41 40	9.4 g	9.6	9.6 g	9.8	9.5?	9.6 g			-3	+7	+19
43 47	13.0	12.7	12.7	12.8	13.2	13.1			3	+10	+20
44 43 37	7.7 g	7.8 g	8.2 8.4	8.8 g	7.6	6.8 g			3 +26	+10 36	+20

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Saturday July 21, 1917

10-inch Metcalf Telescope

Examination of Plate M7103

Taken with Apertures Full, 6-inch, 4-inch

Circle of good definition was marked about a year ago, with the remark that images with Full aperture and with aperture 6-inches could not be distinguished, while those with 4-inch were sharper but no better in form.

Diameter of Circle drawn a year ago, 145 millimetres

Later The circle was erased and independently drawn. Marks were noted at the point where the images cease to be distinguishable. Diameter 145 millimetres, as before

The previous observation that images with full aperture and with aperture of 6-inches cannot be distinguished from each other, is confirmed. Also the observation that the images with 4-inch aperture are sharper than the others, but no better in form.

Monday August 20, 1917

10-inch Metcalf and 8-inch Draper Compound

Diameter for fair Images mm	"	°	Plate	Diam. of Circle	Focus	Images Diameter "	'	°	Ratio Focal
180	32400	9.0	M7662	140 mm	5	25200	420	7.0	1.3
200	36000	10.0	M7630	145 mm	4	26100	435	7.2	1.4
114×80	14560	5.4	~~23563~~ 23573	70×95 mm	4	11410 × 15485	190×258	3.7	1.5
91×110	16300	4.5	I 33957	55×65 mm	4	8965 × 10595	149 133×177	2.4	1.7
100	16300	4.5	I 29838	75 mm	4	12225	204	3.4	1.3
115	18740	5.2	I 28857	80 mm	4	13040	217	3.6	1.4
~~110~~ 115	17930	5.0	I 36447	75×85	5	12225 × 13855	204×231	3.6	1.4
85×95	14630	4.1	I 36439	55×65	4	8965 × 10595	149 133×177	2.4	1.5
			M7103	145	5	26100	435	7.2	.
139		4.8	Mean I plates	73		11886 196	198	3.3	1.47 ~~1.56~~
190	34200	9.5	Mean M7 plates	143		25800	430	7.2	1.35

The MC plates give a good field 7° or more in diameter; the I plates 2°.5 to 3°.5. The discussion of Corrections for Distance in No. A. 71, 3 showed that for I plates the Corrections within 25 mm of the centre are also usually less than 0.1 magn.

If it is assumed that images require a correction of less than 0.1 magn. even when large, if within a third of the diameter of the circle from the centre of the plate, then the field in which Corrections are less than 0.1 magn. will comprise regions within 1.1 of centre for I plates and within 2.4° of centre in M7 plates.

In general, it may be said that

[Cont. p. 202]

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Monday, Aug 20, 1917

10-inch Metcalf and 8-inch Draper Cont.

the distance at which images are measurable is about ~~2.5~~ $(2.5)^2$ times as great with the 10-inch as with the 8-inch.

The estimates on I plates were, I think, somewhat less accurately [accurately for large images] critical than on M 7 plates, and probably the field should be slightly diminished when compared with the latter. Factor of the ratio 2.2 as given above, 2.5 would probably be more nearly correct.

D. S. Ogmi

Estimates of brightness of eight stars a, b, c, d, e, f, g photographic sequence (M.P. 7) in terms of Stellar Magnitude of these plates

Direct Comparisons

MC 11133 p.c.

	Compared with MC 11129 p.c.	MC 11134 p.c.	Mean	Resid.
a	6.5	6.5	a 6.57	1 1 10
b	7.2	7.2	b 7.30	1 1 11
c	8.6	8.1	c 8.52	1 4 31
d	8.7	8.7	d 8.85	1 1 22
e	9.4	9.4	e 9.48	2 2 10

MC 11062 p.c.

Compared with

	MC 11060 p.c.	MC 11065 p.c.
a	6.7	6.6
b	7.4	7.4
c	8.8	8.6
d	9.0	9.0
e	9.6	9.5

On both the above ~~plates~~ pairs, the faintest images are sharper on the I plates than on the others.

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Saturday, August 31, 1917.

DS Cygni -

Estimated of diffraction images of stars a, b, c, d, e, f, photographic sequence on terms of primary images of stars in visual sequence as marked on MC 11133

Diffraction images underlined

MC 11133

10.05 g 1 a 10.15, 10.09
a 2 f 10.24 10.12 03,03

10.74 K 4 b 11.14, 11.07, 11.50
b 0 l 11.07 11.28 10 17,26
b 4 m 11.70

12.28 0 1 c 12.38, 12.48
c 2 p 12.68 12.43 05,05

12.28 0 3 d 12.58, 12.68, 12.62
d 0 p 12.68 12.63 05,05,01
d 4 q 13.02

13.02 q 1 e 1 13.12, 13.06
e 2 r 13.26 13.09 03,03

e pfq is the same as e pic. - 3.74

	Mean		
a	10.17	05, 05	6.43
b	11.34	09, 09	7.60
c	12.50	07, 08	8.76
d	12.64	01, 02	8.90
e	13.09	00, 00	9.35

MC 11062

g 2a 10.25, 10.19
a 1 f 10.22 03,03

f 1 b 11.17, 11.70
b 2 m 11.47 25, 25

0 3 c 12.58, 12.58
c 1 p 12.58 00,00

0 4 d 12.68, 12.68, 12.62
d 0 p 12.68 03,03, 02,04
d 4 q

q 1 e 13.12 13.06
e 2 r 13.09 03,13

Saturday, October 20, 1917

12 30 Nova Persei No. 2

Estimates of brightness on recent plates.

AC 17397
11.9

AC 18305
f 2
< 12.5

AC 18549
13.0

AC 17027
11.4 2f X/p

AC 17247
m.s. < 12.3 p

AC 17050
12.1 e q

12 40

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Friday, November 2, 1917

Prof. Region Section Dobrieski

Examination of Plates for Position of Star 18a of the Lyncene

(1) MC 5496 (blue) Comparison Star Plate
The star marked 18a is near No. 12 as shown on chart at the right

Magnitudes of (1) and (2) nearly equal on yellow plates, but (1) is more than a magn. fainter than (2) in blue plates.

Magn. of (1) is nearly equal to that of (2) on yellow plates, but (2) is more than a magn. fainter than (1) on the blue plates. Red star

(2) On MC 5524 (Yellow) Marked for Cat.
Star Marked 18a is near No. 4, 20, 21, and 22
Star 18a not measured with Catalogue

MC 8519 (yellow) Marked for Cat. 1° square
18a = (1) But (2) may have been measured for Cat. 4° square as plate probably not yet marked at that time, and was assigned a MC 8534.

MC 6070 (Yellow)
Neither star marked. (2) probably measured for Cat. 4°

MC 5593 (blue) Marked for Cat. 1° square.
18a = (1) but (2) might have been measured for Cat. 4° square as plate probably had not been marked when the latter was measured.

MC 5680 (blue)
Neither star marked

Friday, November 2, 1917

Prof. Lunt, Cat.
Star 18a Cont.

MC 8501 Marked for Cat. 1° Square
18a = (1) but (2) might have been measured for Cat, 4° Square.

Estimates of Brightness

18a(1)
blue 12.38
yellow 11.69
C.I. 0.67

MC 5496 (blue) 12.38, 12.38 12.38 00,00
11.98 17 4 18a(1)
18a(1) 1 18 12.48

13.41 21 2 18a(2) 13.61, 13.36 13.48 13, 12
18a(2) 3 22 13.66

18a(2)
Blue 13.48
yellow 11.48
C.I. 2.00

MC 8519 (yellow)
11.47 17 5 18a(1) 11.97, 11.53, ~~11.58, 11.68~~ 11.71 ~~67~~ 28, 16, 11 ~~28~~, ~~26~~, 18, 08
18a(1) 0 18 11.53
18a(1) 1 20 11.48
18a(1) 5 18 b.

11.48 20 2 18a(2) 11.48 a.
18a(2) 3 18 b

This star was not measured in Decca.

On the cover of MC 5524 (yellow), marked for catalogue, it is stated that two more stars is marked for 18a

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Saturday, Nov. 3, 1917

Pos Repsn Dent, Dr. Cat, 4° Lyrae
Mates to be looked up.

Orig. No. DM No. 388	-0°3597	According to DM this is further south than No. 387, Dst DM -0°3575, but on photograph it is further north. Examined on D 8869, July 31, 1893 D 31860 July 13, 1904 No change in relative positions. Proper motion as great as 5" would be easily seen. Probably a mistake in DM.
405	-0°3581	According to DM this star is slightly south of -0°3583, No. 386, but no change of position is seen on the two plates compared above. Mistake in DM.
245	-2°4781	"Measures difficult." The star is a close double on MC plates. Combined light measured.
124	-1°3584	"Color Index 2.38". Reduces confirmed. No evidence of variability on the 3 blue or 3 yellow MC plates measured.
101	..	Color Index 2.27. No evidence of variability
243	-0°4786	" " 2.25 " " " "
424	..	"Error in DM. Cannot identify LDM." Not in DM.
425	-0°3601?	Evidently an error in DM. Neither star shows any change of position on the two plates mentioned above.
426	-0°3600?	

Saturday, Nov. 3, 1917

Pos Dent, Dr. Cat.

305a	..	Follows 305b, DM -3°4421, and is north of it. Distance about 0'.2.
81	..	Color Index 2.52. Reduces confirmed. No evidence of variability.
81a		Added because it is near No. 81. Follows about 2s, north 0'.2. Pty. magn. about 12.8. Ptv. about 12.4. The contrast of color between 81 and 81a is shocking.
317	-3°4432	"Faint confirmation on MC 5680?" Yes. Follows slightly but is nearly superposed. About the 14th magn. Photographic. Makes measures on blue plates difficult.
438	..	No. 438 is in the same right as centers as No. 439 and 0'.7 south.
439	..	
337	-2°4811	Color index 2.01. Measured on only one blue plate, MC 8501. Apparently not identified on the other two blue plates nor on MC 6070 yellow. Examination of plates confirms reduces. No evidence of variability.
77	~~-1°3612~~ ..	Color index 2.88. Reduces confirmed. No evidence of variability on blue or yellow plates.
78	-1°3615	Very faint. Estimates to be made by M.S.D. A star in this position does not show change on MC plates, nor on D 8869, July 21, 1893 nor on D 31860, July 13, 1904. Mistake for DM 7.

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Saturday, December 22, 1917

054974 V Camelopardalis. See also BK 35:171

Estimates of brightness of Comparison stars in terms of Sequence A1. For reducing sweep Boundaries in E.N. BK 1; 38

Both Sequences marked on AC 14920

	AC 14920 4h 7m5	AC 18019 6h 7m5
a	9.3?	9.3
b	6.8 pm	6.8
c	9.3?	9.2
d	9.9?	9.8
e	10.8	10.7
f	11.6	11.5
l	12.7	~~11.5~~ 12.7?
m		g 11.8?
g	12.0	

Approximate magnitudes

a 9.3
b 8.8
c 9.2
d 9.8
e 10.8
f 11.6
g 11.9
l 12.6

The above magnitudes are only for the purpose of having some idea of the brightness of V Camelop. near maximum of 1915.

Saturday, December 22, 1917

054974 V Camelopardalis.

Estimates of Brightness on Plates taken near Maximum

AC 12967 Feb. 29, 192
m.s. < 11.0 p

AC 12625 Oct. 9, 1911
10.8

AC 12653 Oct. 23, 1911
11.0

AC 12705 Nov. 7 1911
10.8

The variable was at maximum October 20, 1917, visual magnitude 9.5: With a photographic maximum of 10.8, the C.I. would be 1.3 magn.

See also E. N. Books 1: page 38
E.S.L.

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Saturday, December 22, 1917

Examination of Plates to find star having common proper motion with a Orionis. Ephemeris needs a distant comparison. Position not given but is announced in Circular

Monday, September 8, 1919

Examination of J.C. Mackie's
New star at 4h 20m 2s 1m +17° 16' (1855)

Carte

This star is very close to the Carte Region at 20h 2m +17°.5. A plate, overlooked by Miss Mackie was taken June 17, 1914, seven months after the maximum on Nov. 22, 1913.

There is a faint star (14.5) so close to the position that it could not be told within errors of measurement on AC and AZ plates whether it appeared, neither or both the position was identical

13	13.4	12.8	at 20h 2m +17°.5.	
14	12.6	13.5	by Miss Mackie was taken June 17,	
15	13.8		1914, seven months after the maximum	
16	14.1	13.9	on Nov. 22, 1913.	
17	14.4		There is a faint star (14.5) so close to the	
18	14.8	14.6	position that it could not be told within	
19	14.9	15.0	errors of measurement on AC and AZ plates	
20	15.5	15.2	whether it appeared, neither or both the	
			position was identical	

Da

MC 5885	1333	14.5^{4}
	11340	14.5^{4}
	11339	too poor
	6411	14.0 13.9

Seq

g	14.2	14.10	
a	14.5	14.45	
a	14.9	14.82	
t	15.5		
p	13.7	13.69	

On MC 6411, the image is obviously elongated and brighter at the following end. Superposition on MC 16228 shows that this bright portion follows the faint star by a very small amount, probably about 3" of arc.

MC 6338	14.0 13.9	See Remarks on MC 6411
5810	13.4^{8}	" " " " "
16228	14.4^{3}	Nova Seen in Prob. star,
16227	14.5^{4}	" " ^{2} " "
5709	13.4^{8}	See Remarks on MC 6411

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Monday, Sept. 8, 1919

Comparison Stars for J.C.M.'s Nova Sagittae
$20^h\,01^m + 17^\circ\,5$

Carte	Magn.
1	8.17
2	8.85
3	8.84
4	9.30
5	9.74
6	10.56
7	10.86
8	11.07
9	11.48
10	11.79
11	12.23
12	12.61
13	12.81
14	13.50
15	13.84
16	13.88
17	14.42
18	14.64
19	15.01
20	15.18

Compared with Sky for Carte 20 $+17^\circ 5\,16$ (1855)
MC 5709

a, b, c, d too bright

1 pr 1 e pr 8.29
e pr 5 2 pr 8.35 8.32

2 pr 1 f pr 9.15 9.29
3 pr 1 f pr 9.14 9.03
f pr 2 4 pr 9.10

3 pr 2 f pr 9.04
f pr 1 4 pr 9.20 9.12

4 pr 0 f^2 pr 9.30
3 pr 2 f^2 pr 9.04 9.23
f^2 pr 4 5 pr 9.34

4 pr 2 f^3 pr 9.50
f^3 pr 2 5 pr 9.54 9.52

5 pr 3 g pr 10.04
g pr 1 6 pr 10.46 10.25

5 pr 3 g pr 10.04 10.25
g pr 1 6 pr 10.46

6 pr 1 h pr 10.66 10.71
h pr 1 7 pr 10.76

6 2 h 10.76
h 0 7 1886 10.83
h 2 8 10.88

7 3 K 11.16
K 0 8 11.07 11.17
K 2 9 11.28

9 3 l 11.78
l 0 10 11.77 11.83
l 3 11 11.93

11 2 m 12.43 12.47
m 1 12 12.51

12 1 n 12.71 12.66
n 2 13 12.61

13 3 0 13.11 13.20
0 2 14 13.30

14 3 p 13.80 13.59
p 3 16 13.38

16 2 g 14.08 14.10
g 3 17 14.12

16 5 r 14.38
r 0 17 14.42 14.45
r 1 18 14.54

18 2 s 14.84 14.82
s 2 19 14.81

~~19 1 t 15.11 15.14~~
~~t 0 20 15.18~~

Monday Sept. 8, 1919.

Comparison Stars Cont.

Mean Res			MC ~~5510~~ 16227			Magn. (+3.74)		Magn J.C.M. 9:5	p 214
	from	from J.C.M.							
a	6.82 · 17	18	5 4 a diff		10.14				
b	7.20 · 15	15	a diff 1 6		10.46	10.39	a	6.65	7.00
c	7.44 · 26	26	a diff 3 7		10.56				
d	7.80 · 16	15	6 2 f diff		10.76				
e	8.27 23	18 25	f diff 0 7		10.86	10.80	b	7.06	7.35
f	9.05 02	00 02	f diff 2 8		10.77				
f'	9.18 06	11 17							
f^2	9.43 20	11 32	7 2 e diff		11.06	10.98	c	7.18	7.40
f^3	9.66 14	· 14	e diff 3 8		10.77				
g	10.19 06	39 29							
h	10.88 11	· 12	8 3 d diff		11.37				
K	11.17 a_2	. .	d diff 0 9		11.48	11.38	d	7.64	7.95
l	11.83 a_2	. .	d diff 5 10		11.29				
m	12.47 a_2	. .							
n	12.66 a_2	. .	g 4 e diff		11.88	11.78	e	8.04	8.45 8.32
o	13.20 a_2	. .	e diff 1 10		11.69				
p	13.69 a_2	. .							
q	14.10 a_2	. .	12 3 f diff		12.91	12.81	f	9.07	9.05 9.05 9.03
r	14.45 a_2	. .	f diff 1 13		12.71				
s	14.82 a_2	. .							
~~t~~	~~15.14~~ a_2	. .	12 3 f+1 diff		12.91	12.81	f'	9.07	9.35 9.12
			f+1 diff 1 13		12.71				
			13 1 f^2 diff		12.91	13.06	f^2	9.32	9.85 9.23
			f^2 diff 3 ~~13~~ 14		13.20				
			14 2 g diff		13.70	13.59	g	9.85	10.45 10.50 10.25
			g diff 1 16		13.48				

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Thursday, September 11, 1919

J.C. Mackie's Nova $20^h 3^m 4^s$ $+17^\circ 24'3$ (1902)

Estimates - Personal Equation

Dec	Mags.	Scale				
	1922		MC +33 11340			
a	6.8	6.8	n.s. < 14.4	✓		
b	7.2	7.2				
c	7.4	7.5	MC 6411	14.1 +3.4 ✓	K	
d	7.8	7.8				
e	8.3	8.4	6338	~~14.2~~ 14.0 ✓		
f	9.0	9.2				
f'	9.2	9.3	1333	~~< 14.8~~ n.s. < 14.4		
f''	9.4	9.6				
f³	9.7	9.8	11339	~~< 14.4~~ n.s. too poor		
g	10.2	10.4				
h	10.9	11.1	5810	~~14.2~~ 13.9 ✓		
k	11.2	11.4				
l	11.8	12.1	16228	~~< 14.4~~ n.s.? 14.3? even?		
m	12.5	12.7				
n	12.7	12.9	16227	too faint poor		
o	13.2	13.5				
p	13.7	14.0	5709	~~14.4~~ 13.9		
q	~~14.0~~	14.1	14.4			
r	~~14.6~~	14.4	14.7			
s	~~15~~	14.8	15.1	a 2124	~~< 14.4 n.s.?~~	< 14.4 n.s.? ✓
				2364		< 14.2 n.s.
				a2 12053	n.s	< 10.0
				a2 12042		9.9
				a2 12033		10.0

Faint star 14.5 near Nova

Thursday Sept 11, 1919

Nova Cnc.

Estimate of Separation from star r
Magn. 14.8

Scale with diagonal lines for measuring decimals.
Ruled lines 0.2 mm apart

MC 5709
0.20 × 0.2 = 0.04

MC 5810
0.03
0.15

MC 6338
0.20
0.04

98.2
.04
3.928"
15) 0.3262
3928
30
92
90
28

Preceder star Magn. 14.8 by 0.2s or 0.3s

Remark A line through s and t passed directly through the bright part of the image on MC 6338, but leaves the centre image to the left (preceding) on MC 1333

MC 16228 passes through end of image? faint?
11340 passes through end of image?
6411 passes through image nearly separated.
5810 " " " "
a 2124 leaves image entirely to the left.

Remark on MC 16228 The image of the faint star appears abnormally bright, but may be defective. Most probably the Nova is present and about magn. 14.4

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Friday, September 12, 1919

Nova Cont.

Estimates on a few early plates

28647	~~n.s.~~ n.s.	< 12.5
24129	n.s.	< 12.5
27769	n.s.	< 14.3
13059	n.s.	< 11.8
23643	n.s.	< 14.2
A 909	n.s.	< 12.5

Tuesday, Novembo. 18, 1919

Estimates of Diameter of Images.

Plate ♀ 25350

Near Center

	a	b		a	b
Pole Star	3.4	6.0		5.9	10.2
	3.2	6.0		5.5	10.0
	3.0	6.0		5.0	10.0
	3.0	6.6		5.0	10.0
	3.0				

Near edge

28	3.6	6.0			5.0	10.0	
1	3.1 ~~3.7~~	4.0	5.7 × 6.8	12.4 / 3876 = .313	5.0	8.6 × 11.0	3.30 / 105.6 = 3.20
4	3.0 × 3.8		5.7 × 6.7	11.4 / 3819 = .295	5.0 × 6.2	9.2 × 11.0	3.10 / 101.2 = 3.27

3.13
3.35
3.24

One unit = 1/3 millim. for abov measures

One unit = 1/5 millimeter for abova plates.

For ordinary images the large images may be assumed to have just twice the diameter of the small ones. This does not hold for the exceedingly bright Pole Star however. Near the edge where the images have very irregular form, the ratio of the areas is not much more than 1 to 3.

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Plate I 35230 Cont.

Images near edge

		a	b	
1		5.0×6.6	9.1×11.0	3.30 / 100.1 = 3.03
4		5.0×6.1	9.3×11.1	3.08 / 103.2 = 3.39
	faint	5.0×6.0	9.1×11.0	3.00 / 100.1 = 3.34
		5.1×6.1	9.2×11.6	3.11 / 101.2 = 3.26
				3.34

The above measures were image parallel and perpendicular to the axis of distorted images near the edge. It confirms the result of the previous page, that the ratio of the large to the small image is only about 3.3 instead of 4.0. This is true even of very faint images.

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