| | | |
|---|---|---|
| $6^h$ +30° | Vars marked | AC 7230 |
| 0 −60 | " " | AM 2937 |
| 18 −30 | " " | AM 3597 or 99 |
| 0 −30 | " " | AM 7837 |
| 15 +60 | " " | AC 4985 |

November 5, 1906

Estimates of Var. +28°54

For comp. stars, see I 13236 and I 9666 For measures of sep. see E. F. L's. Bk. 30, 216.

✓ I 10390
Est. 8.8
Images square & very dense.

✓ I 15739
Not covering again

I 4498 Too poor & partially not covering

✓ I 19451
Est. 9.5

✓ I 10389
Est. 8.7

✓ I 11595
Est. 9.6

I 11600
Est. 9.5

I 11732
Est. 9.5

I 13140
Est. 8.7

Nov. 5, 1906

I 13149
est. 9.0

I 9449
est. 9.7 very near edge.

I 2734
est. 9.5 very near edge.

I 13904
est. 9.5

I 7481
est. 9.8 very near edge.

I 13895
est. 9.0 dense

I 2686
est. 8.7

I 5278
est. 9.7

I 13742
est. 9.2

I 19211 Eryth.
est. 9.4

Nov. 5, 1906

I 19236 Eryth.
est. 9.1

I 19213 Eryth.
est. 9.6

November 6, 1906

Estimate of +28°54 (contd)

✓ ac 3198
est 9.0

✓ ac 2201
Est. 9.2

✓ I 19382
est. 9.5

✓ I 17049 Dual. 1
Useless

✓ ac 2242
Est. 9.0

✓ ac 2730
Est. 9.7

✓ ac 3947
Est 9.6

✓ ac 4011
est 9.4

ac 3710 Too poor
d + v ?
e not seen.

---

Nov. 6, 1906

✓ ac 3136
9.1

✓ ac 3086
8.8

✓ ac 3079
9.6

✓ ac 2957
9.3

✓ ac 2942
9.6

✓ ac 2936
9.0

✓ a~~c~~m 3259
9.0

✓ am 3745
9.5

✓ am 3770
8.8

✓ am 243
8.8

✓ am 255 {mean effect of very poor plate
9.5? e not seen, f seen

✓ am 554 Iso.
9.5? var badly seen,
e not seen

✓ am 595 Iso.
9.6

✓ am 604
8.7

✓ am 696
8.9

✓ ac 2741
9.6

✓ ac 2711
9.0

✓ ac 2342 too poor.
9.6?

✓ ac 2281
9.1

✓ ac 2225 Poor
9.5

Nov. 6, 1906

√

√ ac4034 very poor.
8.7

√ ac4125
9.6

√ ac4138
9.3

√ ac4188
8.8

√ ac4194
9.1

√ ac4212
9.2

√ ac4301 very poor
e1 n

√ ac4324
9.0

√ ac4219
9.4

√ ac4285 poor
9.1

√ ac4294
Too poor.

√ ac4366
9.0

√ ac2194 Too poor
+ near edge.

√ ac2134 (double images)
8.9

√ ac5067
d2 n

√ ac4989 very poor
e1 n ?

√ ac4562
9.6

√ ac4472 Too poor
9.3?

√ ac4440
8.9

√ ac4406
9.3

Nov. 6, 1906

√ ac4373
Too poor.

√ ac4330
9.2

√ ac4416
Not coming.

√ ac4540
9.7

√ ac3249
9.4

√ ac3297
9.6

√ ac4033
9.6? Too poor

√ ac3829
Too poor.

√ ac3868
Too poor.

√ ac4166
Too poor

√ ac4179
9.7

√ ac7176
9.4

√ ac7257
Too poor

√ ac7083
9.5

√ ac7060
9.3

√ ac4561
poor images.
9.6

√ ac4571
9.0

√ ac4995
9.5

√ ac5113
Too poor.

√ ac5118
9.5

Nov. 6, 1906

✓ ac5157
9.6

✓ ac5210
Too poor.

✓ ac5774
8.9

✓ ac5999
9.4? Too poor.

✓ ac6535
Too poor.

✓ ac7142.
9.4

✓ ac7919
8.9 Images distorted

✓ ac2073
9.6

✓ ac5255
9.6

~~ac5322~~

✓ ac5322
9.2

✓ ac5376
9.4

✓ ac5616
9.0

✓ ac5651
9.4

✓ ac5788
9.7

✓ ac5811
9.5

✓ am91
9.0

✓ am189
8.7

✓ am206
9.3

Nov. 6, 1906

✓ I13517
9.3 dense images

✓ I13454 poor pl.
9.6

✓ I13429 poor pl.
9.5

✓ I13416 two images
1st im 9.4
2nd „ 9.3

✓ I13496
9.6 dense

✓ I13305
8.8

✓ I13331
9.5

✓ I13373
9.0 very poor.

✓ I13202
8.9

✓ I13213 Dupl. 1
Useless

✓ I13225 Dupl. 1
Useless

✓ I13274
8.8 too dense

✓ I13263
9.6

✓ I13286
8.9

I13888 (3 images)
(1) 9.4
(2) ~~9.5~~ 9.3
(3) 9.3

✓ I13170 Dupl. 1.
Too poor

✓ I13154
9.5

✓ I13184
Too poor.

Nov. 6, 1906

✓ I13112
8.8

✓ I13079
Too poor.

✓ I12393
Too poor.

✓ I12176
9.7

✓ I12133
9.7

| I12031
9.8

✓ I12064
9.6

✓ I12020
9.3 images of d elongated.

✓ I11934
9.8

✓ I11809
9.5 dense images

✓ I11749
9.7

✓ I11765
9.7? very dense

✓ I11573
9.4

✓ I11458
Too poor

✓ I10552
9.6? Too dense.

✓ I10630 (2 bright images)
(1.) 9.7
(2) 9.6

✓ I10441
8.9

✓ I10359
9.8
Images elongated

Nov. 6, 1906

✓ I9561
9.7

✓ AC4321
9.7

✓ AC2045
9.8

November 7, 1906

Contin. of exam of plates of +28° 54

✓ AC 166
9.8

✓ AC 7820
Not cov.

✓ AC 7752
Not cov.

AC 7791
not cov.

✓ AC 7718
Not cov.

✓ AC 7670
✓ " 7265
✓ " 6642
✓ " 3765
✓ " 3785
✓ " 3854
✓ " 7718
✓ " 487
not covering

✓ Am 83
✓ 94
✓ AC 379
✓ Am 40
not covering

✓ AM 1314
Not covering

✓ AC 67
Too near edge

✓ Am 976
9.5

✓ Am 986
9.0

✓ Am 992
9.5

✓ Am 1015
9.6

✓ Am 1087
9.6

✓ Am 1394
9.4

✓ A. M. 1408
9.7

Nov. 7, 1906

✓ Am 1508
9.3

✓ Am 1614
8.8

✓ AC 7722
9.2 near edge

✓ AC 7922
Too near edge.

✓ AC 7335
9.6?
Very poor & near edge

✓ AC 7304
9.6?
Too poor & near edge

✓ AC 3102
9.1

✓ AC 2818
9.4
Images elongated

✓ AC 2797
Too poor

✓ I 18861
9.3

✓ I 18719
9.4 ~~d~~ Images poor

✓ I 18581
9.7

✓ I 18439
9.8

✓ I 18389
Too poor.

✓ I 17087
9.7

✓ I 16521
9.5

✓ I 20929
9.6

✓ I 20148
9.6

Nov. 7, 1906.

✓ Sp. I 16410
✓ Too poor.
$A_2$ N?

✓ I 19838
9.5?
Images very dense

✓ I 20037
9.7?
Sp.

✓ I 19643
9.8?
Sp.

✓ I 19374
Too poor.
Sp.

✓ I 19102
9.0
Images dense

✓ I 18992
9.6?
Images dense

✓ I 22901
9.9.

✓ Ac 1107
9.4

✓ Ac 1098
Too poor

✓ Ac 1130
9.6

✓ Ac 1205
Too poor.

✓ Ac 1746
Too poor

✓ Ac 1825
9.0

✓ Am 2039
8.9

✓ Am 3254
Too poor.

✓ Ac 120
9.5
Images distorted 2 images

Nov. 7, 1906

✓ Ac 77
Too poor.

✓ Ac 401 (Iso)
9.0
very poor.

✓ Ac 433
8.7
Images distorted.

✓ Am 4443
9.7
Near edge.

Not covering
✓ Am 3758
✓ " 3731
✓ " 3677
✓ " 3258
✓ 3153
✓ 3115
✓ 3078
✓ 3045
✓ 2977
✓ 2936
✓ 2910
✓ 4409
✓ 4346

Am 4323
✓ Not covering
Am 4307 ✓
4403
3985 ✓
3914 ✓
3955 ✓
3866 ✓
3836
3875 ✓
4441

✓ Ac 917
Too poor
c S N ?

✓ I 15501
Too poor

✓ I 15353
9.6

✓ I 14218
9.5

✓ I 14114
9.5

Nov. 7, 1906.

✓ I 14104
9.7

✓ I 13995
9.6

✓ I 13862
8.8

✓ I 13806
9.7

✓ I 13608
9.5?
very poor.

✓ I 13630
9.4

✓ I 13637
9.7

✓ I 13661
9.6

✓ I 15953
9.8

✓ Am 2878
✓ 2851
Not 2775
✓ covering 2705
✓ 2321
✓

✓ I 28066
Too near edge.
9.5?
Compared on c only
diff plates

✓ I 16357
9.8

✓ I 16280
8.8

✓ I 16389
9.7

✓ I 16202
9.7 poor plate

✓ I 15885
8.9

Nov. 7, 1906.

✓ I 15854
9.1

✓ I 15532
Too poor.

✓ I 22251
9.9

✓ I 21527
Not covering.

I 21441
✓ Not covering.

✓ I 24560.
9.7

✓ I 24480
9.6?
very dense

I 23772.
✓ Not covering.

✓ I 23125
9.6

✓ I 23032
9.7

✓ I 28062
9.0
very dense

✓ I 28026 Sp.
9.7

✓ I 28027 Sp.
8.9

✓ I ~~28~~ 28017 Sp
9.7

✓ I 21902 Sp.
Not covering

✓ I 13719
Too poor.

✓ I 13738 Sp.
9.9

I 3289 Sp
Does not show ft. stars

✓ I 3287 Sp
Not covering

Nov. 7, 1906

✓ I29592
9.2
very dense

✓ I29625
9.6

✓ I29227
9.6?
Images too dense

✓ I28175 Sp.
9.2?

✓ I13732 Sp.
9.7

✓ B3286
Shows to 7 ft.

✓ B3277

✓ B3223

✓ B2022

these plates are early B ones, Class I, do not show ft. stars

✓ I31331 Sp.
9.5

✓ I31188 Sp.
9.5

✓ I31196
9.5

✓ I32157 Class S
9.7

✓ I30947
9.8

✓ I29721
9.7

✓ I29693
9.8

✓ I28017 Sp.
9.7

✓ I27762
9.1?
Too dense?

✓ I27651
9.1

Nov. 7, 1906

✓ I27397
9.8

✓ I26293
9.0
Images too dense

✓ I26028
9.4

✓ I25927
9.0

✓ I25382
not covering

✓ I13774
8.9 bright image
9.0 ft. "

✓ I~~25927~~ 24864
Too poor.

✓ I13732 Sp
9.7

✓ I25689
9.8 1st image to left
9.2 2nd image

✓ I33260
9.5

✓ I28026
9.8

✓ I28027
9.1

✓ I32349
9.6?

✓ I10153 (Class D)
d 2 n

✓ I13755
9.6? very poor

✓ I13938
9.8

✓ I15772
not covering,

Nov. 7, 1906

✓ ac 1884
9.5

✓ ac 1852
9.0

✓ ac 1792
Too poor + near edge

✓ ac 1727
Too poor + near edge

✓ ac 1222
9.5

✓ ac 1690
Too poor + near edge.

✓ ac 1181 near edge
9.1

✓ ac 1154
9.1

Nov. 8, 1906

✓ ac 4144
9.3

✓ ac 3943

d3 N

✓ ac 3835
Too poor.

✓ ac 3310
9.7

✓ ac 3239
9.7

✓ ac 3156
c5 N
Too poor.

✓ am 1625
9.6

✓ am 1661
9.7

✓ am 2070
9.4

✓ ac 1053
Trails. Can not est.

✓ am 2215
9.2

✓ am 2229
9.6

✓ am 2331
9.4

✓ am 2776
9.5

✓ am 2853
9.7

✓ am 2919
9.6

✓ am 2955
9.6

Nov. 8, 1906

✓ am 2984
9.0

✓ am 3115
9.4

✓ am 3038
9.4

✓ am 3095
9.1

✓ am 3122
9.6

✓ am 3135
9.5

✓ am 3213

d 2 N

✓ ac 4259
9.0

✓ ac 4269
Trails.

✓ ac 4228
9.6

✓ ac 4210
9.0

✓ ac 6952
9.6

✓ ac 6909
~~8~~ 9.1? very poor

✓ ac 6904
9.5

✓ ac 6857
9.5 poor images

✓ ac 6845
9.2 " "

✓ ac 6753
9.7

Nov. 8, 1906

✓ ac 6697
8.7 very poor images

✓ ac 6682
9.1

✓ ac 6621
9.3 poor images

✓ ac 6527
9.3 " "

✓ ac 5787
9.7

✓ ac 5132
9.5? poor.

✓ am 3226

✓ ac 5074
✓ ac 7831
✓ am 582
✓ am 552
✓ am 254
✓ " 188
✓ " 123
✓ " 95

Not covering

✓ ac 1832
Too poor on extreme edge
9.4? A not seen

✓ ac 475
Too near edge.

✓ ac 90
9.4?
Too near edge

✓ ac 3155
9.5? Too poor

✓ am 2310
✓ " 2228
✓ " 2208
✓ " 2192

Not covering

✓ " 2067
✓ " 2026
✓ " 2004
✓ " 1658

Nov. 8, 1906

✓ Am 1642
Not ✓ " 1575
covering ✓ " 1368
✓ " 1366
✓ " 1348

✓ Am 3226
Fth image 9.3 ? A defective
Br. " 9.5

I 9939

✓ I 9529
8.9

✓ I 9490 (Erythr.?)
9.0 ?
Images very dense

✓ I 7514
9.6

✓ I 7420
9.7

✓ I 5126
9.7

✓ I 4473
9.5

✓ I 2635
9.7

✓ I 2696
9.7

✓ I 4474
9.4

✓ I 2054
9.0

✓ I 1972
9.7

✓ I 7584 Sp
Too near edge

I 1636
Not covering

✓ I 311
9.6?
Images too dense

---

Nov. 8, 1906

✓ I 391
9.5?
Too dense

✓ I 121
9.0?
A not on plate
Image dense

✓ AC 2017
9.2

✓ AC 2056
9.3

✓ AC 7183
9.6

✓ AC 7723
9.5

✓ AC 7334
Too poor

✓ AC 7784
Too poor.

✓ AC 7834
9.1

✓ Am 3862
9.6

✓ Am 3941
9.0

✓ Am 3995
9.6

✓ Am 4022
9.7 poor images

✓ AC 4397
8.8

✓ AC 4425
9.2

✓ AC 4511
9.7

Nov. 8, 1906

✓ ac4536
9.6

✓ ac4628
Trails.

✓ ac4996
Too poor.

✓ ac1246
9.0

✓ ac1680
8.9

✓ ac1714
Too poor

✓ ac1807
9.0

✓ ac1844
9.3

✓ ac1929
9.7

✓ ac1976
9.7

✓ ac978
Too poor.

✓ am1098
✓ " 1092
✓ " 1079
✓ " 1018
✓ " 1004
✓ " 984
✓ " 968
✓ " 883
} Not coming.

✓ ac7082
9.4

✓ am864
✓ " 699
✓ " 668
✓ " 602
} Not coming

– ✓ ac7219
8.8

Nov. 8, 1906

✓ ac7275
9.1

✓ ac7136
9.1

✓ ac7177
9.5

✓ ac638
8.9

✓ ac493
Not coming

✓ ac482
Too poor

✓ ac157
9.1

✓ ac134
9.5 ?
Too poor.

✓ ac69
Too poor.

✓ ac48
Too poor.

✓ ac7717
✓ 7753
✓ 7790
} Not coming

✓ ac2929
9.5

✓ ac2876
9.6

✓ ac2795
Too poor

✓ ac2809
Too poor.

✓ ac1070
9.5
Poor pl.

✓ ac1147
9.6

Nov. 8, 1906

✓ ac 1188
e, N

✓ ac 5845
9.5

✓ ac 5944
9.6

✓ ac 6524
9.5

✓ ac 6558
9.5

✓ ac 6622
9.6

✓ ac 6669
9.7

✓ ac 6847
9.5

✓ ac 6865
9.6

✓ ac 2768
9.8

✓ ac 2808
Too poor.

✓ ac 2860
8.9

✓ ac 3006
9.6

✓ ac 3031
9.4

✓ ac 3073
Too poor.

✓ ac 3254
9.7 poor images.

✓ ac 3282
8.8

✓ ac 3840
Too poor.

---

Nov. 8, 1906

✓ ac 3858
9.7?
Defect in film.

✓ ac 2144
9.5

✓ ac 2211
9.7

✓ ac 2249
9.7

✓ ac 2320
9.8

✓ ac 2332
9.7

✓ ac 2359
9.6

✓ ac 4072
Too poor

✓ ac 168
9.0

✓ ac 91
Too poor.

✓ ac 450
Too poor.

✓ ac 492
Too poor

✓ ac 597
9.2? very poor

✓ ac 636
9.8

✓ ac 704
9.7

✓ ac 973
9.7? Too poor

Nov. 8, 1906

✓ a 6084
9.6? Images too dense

✓ a 6053
Images too bright
var > e?

✓ a 5670
9.8

November 9, 1906

Continuation of exam. of plates of +28°54

✓ I 13746
9.4

✓ I 19705
9.8

~~I~~

✓ I 21642
9.2

✓
I 14043
9.4

✓ I 13897
9.8

✓ I 24713
9.7

✓ I 13775
9.2

✓ I 21727
9.5

✓ I 17222 Sp.
9.2
Sp. a.
Sp. d = a
" e = 2nd type
" b = a
" c too dense
" e " " ?

✓ I 21984
9.7

✓ I 19706
9.8 poor plate

✓ I 24712
9.8

✓ I 21734
9.7

✓ I 19251
9.4

Nov. 9, 1906.

✓ I19421
9.8

✓ I19255
9.2

✓ I15712
Too poor.

✓ I13833
8.8

✓ I12275
9.9

✓ I289
9.6?
Too near edge,
e not seen
var 2-3f.

✓ I33717 sp.
9.9?

✓ I33500
9.2

✓ I33729
9.5 Dense image.

✓ I21983
9.8

✓ I16621
9.6?
Too dense.

✓ AC53
Too poor.

✓ AC7143
Too poor.

✓ AC1802
Too poor.

✓ AC49
Too poor.

✓ AC5436
1st image 8.9
" " 9.0

✓ I19666
9.7

Nov. 9, 1906.

✓ I7983
Fogged in region.

✓ I9939
Not cor.

✓ I7481
9.7
& very near edge.

✓ I2734
9.5
near edge.

✓ I11595
9.7

✓ I11600
9.7

✓ I11732
9.7

✓ I5278
9.6

✓ I2686
8.8

✓ I9449
9.7 near edge

✓ I19213 Eryth.
9.6

✓ I19236 Eryth.
9.3

✓ I19214
9.5

✓ I13895
9.4 dense

✓ I13742
9.2 ? too dense

✓ I13904
9.6

✓ I13149
9.0

Nov. 9, 1906

✓ I10389
9.0

✓ I13140
8.8

✓ Ac5655
9.8

✓ Ac7725
9.6
very poor pl.

✓ Ac5034
9.8

✓ Ac7109
9.8

✓ Ac5126
9.1
C much brighter
than do on this plate
c 5 or 6 d

✓ Ac5486
9.5

✓ Ac1935
9.4

✓ Ac7035
8.9

✓ Ac5795
9.5

✓ Ac6646
9.8

✓ Ac6649
9.6

✓ Ac103
not occurring.

✓ Ac1776
9.7

✓ Ac6730
8.8

Nov. 9, 1906

A~~c5006~~

✓ Ac5565
8.6

✓ Ac5793
9.7

✓ Ac2969
9.7

✓ Ac7770
9.4

✓ Ac5624
9.4

✓ Ac6526
✓ 9.8?
very poor pl

✓ Ac5215
9.5
poor pl.

✓ Ac5142
Too poor.

✓ Ac3216
9.6

✓ Ac5231
8.9

✓ Ac3109
9.3

✓ Ac5353
9.7

✓ Ac2039
9.5

✓ Ac1010
9.8

✓ Ac7826
9.6

Nov. 9, 1906

✓ ac 7095
8.8

✓ ac 1757
9.7

✓ ac 7776
d3n

✓ ac 5291
9.6?
Too near edge.

✓ ac 5226
9.2
Poor images, near edge

✓ ac 1672
9.7

✓ ac 2807
9.0

✓ ac 6574
9.7

✓ ac 5512
9.5

✓ ac 5291
Too poor

✓ ac 105
9.6

✓ ac 5313
9.4

✓ ac 5411
9.5?
Too poor

✓ ac 5455
9.5.
Images square

✓ ac 5713
9.4

✓ ac 5487
9.5?
Near edge

Nov. 9, 1906

✓ ac 4596
9.1

✓ ac 5762
9.3
Near edge

✓ ac 5547
9.5

✓ ac 4464
9.0

✓ ac 1256
8.8

✓ ac 1168
9.4

✓ ac 2875
9.5

✓ ac 1141
9.5

✓ ac 2890
9.6

✓ ac 5736
9.3

✓ ac 5712
9.0

✓ ac 5454
9.8

ac 5266

Nov. 10, 1906
+28°54 cont.

√ Ac 980
too poor.

√ Ac 979
too poor.

√ Ac 98

√ Ac 3030
2 images
(1) 9.4
(2) 9.0
The second image looks certainly brighter than first.

√ Ac 5586
9.5

√ Ac 6992
9.0

√ Ac 7052
9.8

√ Ac 6617
8.9

√ Ac 5753
8.8

√ Ac 6867
9.5

√ Ac 2009
8.8

√ Ac 1968
9.5

√ Ac 6932
9.5

√ Ac 3191
9.8

√ Ac 6841
9.3 purple

Nov. 10, 1906

√ Ac 7021
9.3

√ Ac 2152
9.8

√ Ac 631
9.7

Am 78
9.6

Experimental obs. of multiple image plates

Am 995
Multiple exposure. 9
Commencing at left
√ (1) b, N
√ (2) 9.5? scratch over e
√ (3) 9.7
√ (4) 9.8
√ (5) 9.7
(6) Image defective
(7) 9.4
(8) 9.0
(9) 9.0? too faint
Last image very ft

Nov. 16, 1906
Estimates made by E. F. L. See her book 30, 218 for test of my estimates which are the first I have ever made of multiple images.
(1)
(2) 9.5
(3) 9.7
(4) 9.6
(5) 9.7
(6) 9.8
(7) 9.4
(8) 8.9
(9) –

Nov. 10, 1906

✓ Am 3911
multiple image.

9.6.
No variation

✓ AC 98 (multiple)
15 images
5 of var. seen.
7 of c. seen distinctly & two more seen indistinctly to right.

✓ (1) Not seen d 5 n
✓ (2) " " d 4 n
✓ (3) 9.2
✓ (4) 8.9
✓ (5) Image of v defective

The comparisons of images 6, & 7 are too uncertain. However, no great change from (4) is seen. They look about equal or slightly fainter than c.

Nov. 10, 1906

AC 464 (multiple)

✓ 13 images.

(1) ~~only appears for brighter stars~~ —
✓ (2) elongated 9.4?
✓ (3) 9.0
✓ (4) 8.~~9~~8
✓ (5) 8.9
✓ (6) 9.0.
✓ (7) 9.2?

a M 1058
11 images

(1) 9.1
(2) Other images too poor.
(3)
(4)

Nov. 12, 1906

Examination of multiple image plate

AC 952
No short period variables found.

However on superposing AC 2727 I noticed a bright object on the latter plate which is much fainter on the multiple image plate.

Additional plates examined.

AC 1717 object barely visible.
" 1723 3 images. fainter than on 2727
AC 1546 brighter than on AC 1723 and fainter than on AC 2727.

From examination of DM chart and AC 2727, this object appears to be +9° 3707, $18^h 19^m 14^s.2$ +9° 13.2 (1855)

Not in Catalogue as a known var.

Nov. 16, 1906

A plates of +28° 54

✓ A 6087
9.7? Images too dense

✓ A 177
8.9

✓ A 168 (2 images)
1st 9.6
2nd 9.5 very poor images

✓ A 151
~~4 images, no difference~~
9.3

✓ A 1205
1st 9.7
2nd 9.7

✓ A 6053
~~8.9~~?
9.0? Too dense

✓ A 1013
9.4?

Nov 16, 1906

✓ A 5670
9.7

✓ A 882
8.7

November 17, 1906

Examination of several plates for variability of [illegible] Cygni recently named by Comm. Var. Stars of Astron. Gesell.

Star too faint to appear upon the following AC plates
AC 6567, 6620, 5173, 7744, 5294,
4126, 3539, 2928, 7740
And too faint to appear on I
2556, 3778, 4338.

AC 7614 barely seen
var. marked

AC 4951 barely visible?

I 4656 var. faint Oct. 29 1891
I 6816 " " Sept. 1892
I 26000 var nearly equal to ~~star~~ nearest star, north foll.
I 20978 var. considerably brighter than nearest star, north following
var. marked on I 20978
These plates show that the star is really variable, with range of about 0.7 mag. Must be red as the image is very faint for a star of 8.8 mag. (Dn)

Nov 19, 1906

+28°54

Exam. of plates missing

✓ ac 7709
9.6

✓ ac 7883
Class J'

Can not identify?

✓ ac 6488
d 5 n

Star probably at minim.

✓ ac 6023
9.5 ?

Images very poor.

✓ ac 2280
9.2 poor images.

✓ a~~m~~c 310
9.7 ? very poor.

✓ am 2039
8.9

Nov. 19, 1906

✓ ac 2935
9.7

✓ ac 1727
Too poor var. not seen

d 2 n

✓ ac 1714
Too poor. d 3 n

✓ ac 105
9.6

✓ ac 7253
9.7

✓ ac 3952
Too poor.

✓ ac 5266
Too poor.

✓ ac 5118
9.5

✓ am 4072
9.8? very poor

✓ ac 7219
8.9

✓ am 4003
Not covering

✓ ac 2241
Not covering

✓ ac 2909
Not covering

✓ ac 3068
not covering

✓ ac 3190
Not covering

✓ ac 1646
Not covering

✓ ac 5663
Not covering

✓ ac 4085

✓ " 5285

Nov. 19, 1906

✓ I 21187
8.9

I 33243 (Sp)
9.7

I 19344
✓ 9.8
poor shape

I 17186
9.7
✓ dense images

I 17136
✓ 9.4
Is this an Iso plate?

I 16733
✓ 9.3

✓ I 15606
9.0

✓ I 13791
9.7

✓ I 13514 (Sp.)
9.3?

✓ I 13294
9.6

I 13098
✓ 9.6

I 10390
✓ Images sp.
9.4?

I 4870
✓ 9.8

I 4499
✓ Too poor

✓ $I^B$ 3287
not covering

$I^B$ 3289
✓ Does not show
faint enough stars

Nov. ~~19~~ 20, 1906

✓ AC 4321
9.8

AC 6023
Too poor to estimate
✓ Faintest blotch for the var.
G not seen
Rough guess v = 9.4?

AC 4034
✓ 8.9
very poor plate but
var. undoubtedly bright

AC 3130
✓ 1st 9.4
2nd 9.1
2nd appears brighter but second
image of d may be defective

✓ AC 3131
9.4

✓ AC 4324
9.1

✓ AC 2860
9.0

✓ AM 1614
9.0

✓ AC 4033
9.6 very poor

AC 636
✓ 9.7

I 23146 Sp.
9.6? very poor

Nov. 22, 1906

C 98
multiple images.
15 images
1. var. not seen, e not seen, d 6 n
2. " " " " " " d 4 n
3. 9.0
4 9.0
5 8.9
6 8.8?
7 8.8?
8 not seen c, n
9 " " "
10 "
11
12

5 images of var. seen, Image 1 & 2 of var. certainly missing so star rose to max. during exposure of this plate.

---

Nov. 22, 1906

AC 464.

Star at maximum or near, at beginning of exposure, faint towards end.

1. elongated 9.0?
2. 8.7
3. 86
4 8.9

(Too dark for further estimates. 4.20 P.M.)

Nov. 24, 1906

A.M. 1058 multiple images

Observations very difficult on account of star images running into each other.

Variable certainly brighter at last exposure however.

11 images on plate

1. Superposed on ~~f~~ another star
2.
3. Too difficult
4.
5.
6.
7. Superposed on ~~f~~ another star
8 9.4? very difficult
9 9.1
10. 8.9
11. only visible for bright stars. C not seen
var. not seen.

Nov. 27, 1906

A.M. 464.

(1) Only appears for brighter stars
(2) 9.1? very poor image
(3) 9.0
(4) 8.8 7
(5) 9.0
(6) 9.0
(7) 9.3?
(8) 9.3? very poor shape
(9) 9.3
(10) 9.3
(11) 9.4
(12) 9.4
(13) 9.6

Observations somewhat uncertain.

Nov. 30, 1906

Several days ago while comparing multiple image plate AC 9572 with AC 2727, I noticed a bright object in the latter, but much fainter on the former plate. It appeared to identify as +9°3707. See p. 42. On looking up some plates, I found the object marked by Mrs. F. Sp. Md? Var? Looked up by Miss Wells, but not enough evidence of var. found.

On further examination of AC 2727 the object is seen to be different in shape from the other stars,

Another brighter object south following this, is also seen on AC 2727. This object is the same shape as the other stars but turned a different angle. Can it be an asteroid?
This object is not visible on AM 1493, taken Aug. 9, 1902 two days later than AC 2727 and therefore, is

Dec. 5, 1906

Additional plates of +2854

AM 50
9.4

AC 8022
9.3

AC 8008
8.9

## February 1, 1907

AC 5795 superposed on positive from AC 5624.

1. Probably defect
2. " "
3. "
4. Certainly variable
Approximate position
$10^h$ 27.9 ± 57 2 (1855)
Fainter on AC 5795.
Known. RW Cass. 013057
5. Defect on transparency.

6. " " "

7 -

8. Brighter on transparency. Comes exactly in place of a star but may be a defect.
Defect.

9 Defect?

10 " ?

11. Defect

---

## February 6, 1906.

Cont. of Plate AC 5795

12 Defect on transparency
13. " negative
14. " " positive
15 " " "

16. Bright on positive Defect. Not in AC 5622
17 " " " " " " "

18 Defect on positive
19. " "
20. " "
21 " "
22. " "
23 " "
24 " "
25 " "
26 " "

# February 6, 1907

Examination of AC 7028 superposed on positive made from AC 5624.

1. On negative not on positive, or if so much fainter. May be a defect as the shape is perhaps somewhat different from other images

Defect on AC 7028.

2. Much brighter for positive than on negative. This object precedes a bright star.

Known. T Cassiopeia

3. On positive not on negative
-?

Probably a defect, as shape is not quite like the others

4. Much brighter on positive than on negative. Precedes a fainter star

Known. U Persei 14

# February 6, 1907

AC 7028 cont.

5. Probably a defect as the positive is very defective in this region.

6. This is certainly a real star and certainly brighter on negative than on positive.

New.

Very rough Approximate position from DM. chart. Not in DM. $1^{h}\ \overset{25}{\cancel{17}}^{m}\ +4\overset{5}{\cancel{4}}\ 45$ (1855)

Variation confirmed on I plates 15831, 19124, 23989.

7. On positive, not on negative
Defect.

8. Very bright on positive and exactly the shape of the other images. Invisible on negative. Certainly variable

Approximate position $1^{h}\ 31^{m}$ +38 33 (1855)

Known. T Andromedae. +38° 315

9. Two images on positive not on negative They look like stars.

10. On positive not on negative

11. On positive, not on negative. The image is shaped like the star.

Probably 04.1901 announced by Mrs. Fleming in Circ. 98 04.3 +50 8 (1900)

Approximate position from DM. chart $0^{h}\ 2^{m}$ +50 8 (1855) not on chart.

February 6, 1907

AC 7028 cont.

12 On negative, not on positive

Bright on negative. probably a defect. Nothing on AC 5785, AC 8000, or AC 157

13 On negative not on positive

Defect? nothing on AC 5785, AC 8000, or AC 157 in this position
This looks more like a star than 12.

February 11, 1907

Examination of AC 4406 superposed on positive from AC 5624

1. Certainly variable. Bright object on AC 4406, exactly the shape of the stars, not on AC 5624
Known. V Cass.

2. Brighter on positive than on AC 4406. This is the same shape
new. as the stars and appears to be certainly variable
Approximate 1855 position $23^h\ 1.^m2$ $+57°\ 45'$
Variation confirmed on I 1589 brighter, 12130, I 11922.
about 1 magn.

~~3. Brighter on positive than on AC 4406, may be defective on positive~~

~~4. On AC 4406, not on positive, Defect~~

Bright on I 11370, 12021, 11592, 10516, 12130, 1589,

Faint on 11922

February 12, 1907

Cont. of examination of AC4406
superposed on positive from AC5624
New positive used.

3 Brighter on positive
This object is certainly brighter on AC5624 than on AC4406. Marked on plate 11922.

4. Defect on ~~positive~~ negative?
Defect.

5. Very faint object on negative, not on positive
Too near edge.

6. Brighter on positive than on negative
not confirmed by an examination of AC5624

7 Object on both plates appears to be certainly brighter on the positive
Comparison shows that the difference is instrumental

8 On positive, not on negative Defect?

Feb. 13, 1907
Cont. of preceding

(9) A star which is the middle one of three in line appears brighter on positive than on negative.
Not confirmed. Too near edge.

10, On positive, not on negative. Defect?
Image rather long.
Defect.

11. On negative, not on positive. This looks like a star.

Not on AC 197, AC7771, AC7028, AC8056, AC5795 or AC5831,

12. On extreme edge on negative, not on positive.
Probably a defect from shape

13. Bright on negative Defect.
Defect

14. On negative, not on positive
Defect

Feb. 13, 1907.

Cont. of preceding

15. On positive, not on negative

16. On positive not on negative
Seems ~~to be~~ to be possibly variable, but too near edge to be sure

17. Brighter on positive. Scratch near.

18. Bright on positive, not on negative
Just above a brighter star

Defect. Not on AC 5624

19. Two stars close together. Upper one seems brighter on positive

20 Brighter on negative. Precedes a very bright star

21. On positive, not on negative

---

Feb. 13, 1907

Cont. of preceding

22. Faint star, brighter on negative

23. On positive, not on negative
Defect?

24. On positive not on negative. This is shaped like a star. Known variable
Approx. pos. (1855) $0^h 2^m + 50^\circ 9$.

25. On negative not on positive. Shape seems different from the stars.

26. On positive. Probably defect.

27 On negative, not on positive. May be a defect

28. Fainter on positive than on negative

29 On negative, not on positive.
Defect?

Feb. 13, 1907

Cont. of preceding

30. On positive, not on negative

. f.

31. Brighter on positive

32 On positive not on negative
May be a defect.

33 Brighter on negative. Positive may be defective at this point
Comparing AC 5624 & 4406 directly no difference is seen in this star.

34. On negative, May be a defect –

35. Bright on positive. Defect.

36. Bright on positive, not on negative
This is evidently a star and not a defect
Known of Andromedae

Feb. 13, 1907

Cont. of preceding

~~37. On negative, precedes a star of equal brightness~~
~~Defect. It rubbed off.~~ ff.

37 A faint star, perhaps slightly fainter on positive

38. Bright on ~~posit~~ negative, not on positive
Nothing on AC 8056
A defect nearly the shape of the stars. Nothing on AC 4440 taken Dec. 26, 1903. The plate on which this appears was taken Dec. 19, 1903.

39. On negative, not on positive

40 On positive not on negative
Defect.

41. Faint star on negative not on positive
Not on AC 157, AC 5795, AC 8056.
Probably a defect.

42. Bright on negative, nothing on positive
Approx position (1855) 0 42 + 34 50
Known of Andromedae.

43. On negative. Defect.

Feb. 13, 1907
Cont. of preceding

44. Very faint object on negative not on positive.

February 18, 1907

Examination of AC 5215.
Poor plate towards edges, but I can not find a better one taken in the summer.

1. Lesser star of a bright double. Fainter on AC 5215 than on positive

2. On positive, not on negative. Near edge. A defect.

3. Appears a little brighter on positive than on negative.

4. Very bright on negative, not on positive. Shape perhaps different from the stars.

5. Defective image on ~~pos~~ neg. Look up.

6. On negative, not on positive.

7. Brighter on positive than on neg.

Feb. 18, 1907.

Cont. of preceding.

8. Brighter on positive.

9. Bright on negative, not on positive.
Follows a bright star.
Defect?

10. Slightly brighter on positive

11. Brighter on positive?

12. Brighter on positive

13. Much fainter on negative. Precedes a brighter star.

14. Brighter on negative than on positive.
Probably a defect, not exactly in position of star on positive

Feb. 18, 1907

15. Brighter on positive? Faint star.

16. This is fainter on negative than on positive

17 On positive, not on negative

Feb. 19, 1907

Examination of AC 5343 superposed on position from AM 1918.

1. On negative, not on positive
A defect on negative

2. Slightly brighter on negative
Not confirmed on AM 1561, AM 1436
Faint on AM 1051, but too near edge

Known. RY Herculis 3. Brighter on negative
Faint on AM 1312 approx. 1855, 18 54 + 19 25 not in DM.
Brighter on AM 1561

4. Brighter on negative but there is a scratch on positive at this point.
Not confirmed.

5. Brighter on negative
Not confirmed by a direct comparison of AC 5343 with AM 1918

6. Fainter on negative
Too near edge.
Not confirmed by direct comparison

7. Fainter on negative
Difference too slight, may be due to shape of images.

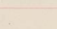
8. May be a little brighter on negative
Not seen on AM 1051, too near edge
" " " " 1436, " "
AM 3749, 3889, star near centre and no variation seen

Feb. 19, 1907

9. This star fainter on neg. or the star above a little brighter.
Probably due to being on extreme edge of plate.
No variation seen on AC 6521, AM 3749, AM 3889
where these stars are at centre of plate.

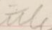
10. Fainter on ~~neg~~ positive. Image on negative is of different shape.
Probably variable. Faint on AM 2573.
Marked on AM 1354. Looked on some plates at $18^h$ $+15^\circ$

11. One of these two stars appears to vary



12. Brighter on neg.
Not confirmed by a direct comparison

13. A little brighter on neg.



14. Brighter on negative. Positive probably defective here

15 Brighter on positive.

Feb 19, 1907

16. A little brighter on positive

17. Certainly brighter on positive
No variation on AC 4986, 5227, 1730, 4923, 6576. 1436.
Original negative AM 1918 is probably defective. Examined by W.P.F. who thinks the increased brightness is due to a defect over the star.

18. Very bright on negative, not on positive
Certainly a star

Known. Z Ophiuchi

19. On edge of positive
Brighter on positive
Appears to be possibly slightly variable, but too near edge to be sure. On AM 3749, 3889, where the star comes nearer centre, no change seen.

20. Brighter on positive. Defect?
Faint star,

21. Certainly brighter on positive
AM 2796, 2767, 2619, 1051, & 1436 show no change in this object.

22. Faint object appears to be brighter on positive

Feb. 19, 1907
Cont. of preceding

23. * Upper of a double star appears fainter on negative
Probably due to different densities

24. Brighter on positive
Probably due to densities

25 Brighter on pos
Not confirmed

26. Faint object on positive, not on neg.
Defect on AM 1918

27 Fairly bright on positive not on neg. This looks like a star and is certainly missing or very faint on the negative.
Probably too faint to appear on this negative

28. Two stars, the upper one of which looks brighter on pos. Very poor images on neg.
Negative too poor

29. On negative, not on positive. Defect?
Defect.

30. Brighter on positive
AM 2767, 2796, 2573 no change.

31. On positive not on negative.
Defect on AM 1918 from which positive was made

Feb. 19, 1907

Cont. of preceding

32. On positive, very faint if really present on negative.
Near edge
Not on negative, but stars of equal brightness as this is on positive do not show on this negative.

33. Brighter on positive. This appears to be real.
Marked on B 27156. Examined on B plates 16035, 9278, 8714,
Var. No. 4. 27972, 13574, 16517, 19115. Seems a little brighter on 16035, difficult in account of its density. Star is certainly brighter on ~~AC~~ AM 1918 than on AC 5343

34. Appears slightly brighter on positive.
This may be instrumental

So many objects appear brighter on this positive than on the negative that it is somewhat confusing

February 21, 1907

AC 5343

Object 33. See preceding page.
New This is ~~B~~ -15° 4842. 18h 1m 31.8 -15 33.9 (1855) 9.2 9.0
This is certainly variable, and fainter on AC 5343 than on ~~AC~~ AM 1448,
Var. No. 4. AC 1730, AC 4923, AC 4986, or AM 1051.

A comparison of AC 5343 directly with AM 1051 shows the certain variability of the object. It may be of the Algol type.

Faint on AM 1436.

B 14038, 14083, 9852, 22007, 31805, 30643, 33702, 33658, 26115 examined. Star of about normal magnitude. Also on B 27972

On B 16035, the star appears a little brighter than normal.

February 22, 1907

Examination of AM 1448 superposed on D , from AM 1918

1. Fainter on negative?

Images very poor at northern part of plate.

2. Brighter on negative

Known. RY Herculis

3. Slightly brighter on positive

4. Appears brighter on the positive

Not confirmed.

5. Brighter on positive

Too faint for negative to show clearly.

6 Fainter on negative, this appears to be real,

Faint on 6544?

" " 1051

Slightly variable. Identify + enter in list of suspected.

7. Fainter on negative?

Probably too faint for negative.

Feb. 22, 1907

8. Brighter on positive

Not confirmed.

9. There seems to be a slight change in this star or the one below it.

Not confirmed

10. Brighter on positive?

Not conf.

11. Brighter on positive?

Not conf.

An object to right of this on AM1448 appears to be a defect.

+

12. A very bright star, certainly brighter on negative.

Known. R Aquilae

13. Slightly brighter on negative

Feb. 22, 1907.

14. Brighter on positive?

A great many of the fainter stars appear thus brighter on the positive so it must be due to character of the images

15. In cluster. This looks a little brighter on the positive
Not conf.

16. Brighter on positive
Not conf.

17. On negative not on pos.
Probably a defect, but am not sure
Appears then a defect imbedded in film.

18. On neg. Probably a defect.
Not on AM 2619, 2573, 4655.

19. A little brighter on pos. Not conf.
Just below this on neg. black spot is a defect? Yes.

Feb. $2\overset{3}{7}$, 1907

Cont. of foregoing

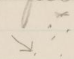
20. A little brighter on neg
Not conf.

21. Brighter on positive?
Not conf.

22. On neg. not on positive
Probably defect
Defect.

23. Much fainter on positive. This appears to be certainly variable with range of 2 or 3 mags.
New. This is $+1^{\circ}\ 3877$ $18^{h}\,57^{m}\,\overset{m}{17.7}$ $+1^{\circ}\ 5.4$ $\overset{8.7^{m}}{(1855)}$
. Faint on AM 4986,
Bright on AC 5227, AM 1436.

24. On neg. not on positive. May be a defect



faint stars. Defect.

Not on AM 2619

25. On negative not on positive.
Looks like a star, but is somewhat more round
Different shape as seen with higher power.

Feb. 23, 1907

Cont. of preceding

26. On negative. May be a defect
Looks like a defect with high power

27. Defect on negative?
Not on 2619, 6544

28. Defect on negative? This looks more like a star than 27
Defect.

29. On positive, may be too faint to appear on negative
Too faint

30. Defect on neg?
A bright defect.

31. Appears a little brighter on positive
May be instrumental

32 On positive, not on negative. This is evidently a real star

Bright on AC 5343 & Am 1918
New. Faint on Am 1448 & AC 5227, Am 1436
Approx. 1855 position 18 23 − 13 12
−13° 5014, 18 23 8.8 −13 12.4 (9.5) (1855)
Marked on B 27628. from Am 1887 & 2442 Variation of about 1.5 mags confirmed by W. P. Fleming.

Feb. 23, 1907

Cont. of preceding

33 Slightly brighter on positive?
Due to different densities.

No. 32 (see preceding page is fainter on Am 875 than on Am 1918

Am 888 No. 32 appears brighter than on Am 875.

This is a difficult object on the AC and Am plates and must be confirmed on B or N plates. I think it is probably a short period variable

February 25, 1907

Comparison of AM 1051 superposed
on D, a positive from AM 1918

1. Slightly brighter on positive? May be due to being near edge

on the positive, this star looks brighter than a, but fainter on the negative

2. Slightly brighter on positive

3. On positive ~~not~~ fainter on negative. ~~May be too faint to appear~~ May be instrumental

4. Fainter on negative.
A direct comparison of AM 1918 with AC 4986 shows this object slightly fainter on AC 4986
Too faint other ones

Feb. 25, 1907

5. Fainter on neg

6. Fainter on neg

7. On neg, not on positive
Probably a defect

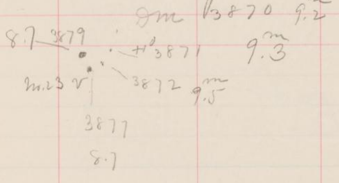
8. Brighter on negative

This negative was abandoned owing to poor images as compared with the positive

Feb. 26, 1907

Search for var. 33 (See p. 76) on other AC or AFM plates.

Also rough estimates of var. 23



+1° 3872 is much fainter on the plates than +1° 3871. There certainly appears to be at least three magnitudes between +1° 3879 and +1° 3872, whereas the difference in DM is only from 8.7 to 9.5

Feb. 26, 1907.

AC 360 23

Feb. 27, 1907

Search for change in var. No. 4
on B plates.
-15°48 42 18h 1.5 -15° 34
Bright on Am 1448. Faint on Ac 5343.
B 16035 var. marked
var. bright, of normal magn.

B 25822
var. bright

B 25523.
Dense. var. slightly fainter?

✓ B 25391, B 24343, B 21786
Not covering

B 25122, 21681
Normal

✓ B 25346
Normal

Var. No. 6 also on plates but too near edge

B 23025 Sp.
Appears to be K

Feb. 27, 1907
Var. No. 4
B 23215 B 23661, B 22702, 21518, 21550
Normal.

B 23694
Slightly fainter.

B 22020, B 22791, 21076
very bright

B 22902
Sp. K? rather indistinct.

B 22982 Sp.
Too poor

B 21257 Sp.
Best yet seen. For G?

B 21312, 19115
Slightly fainter?

✓ B 3572 Sp. Not cov
✓ B 6532 Sp. Too near edge
✓ B 5441 " Too faint.

✓ B 5969 very bright

Feb. 27, 1907

−15° 4842

B5970, 20467
very bright

✓ B5216 Sp.; ~~[illegible]~~
~~not cor.~~ too faint

B4627, 37939, 19327
normal

✓ B20206 B14744 1827 −17.2
not coming.

B20450 } slight change.
B20467 }

B3753
normal

✓ B3911 Sp. B3974
too faint

B3994 B2408
var. bright

B5971
off plate

Feb. 27, 1907

−15° 4842

B2452
var. very bright.

✓ B2790
too poor.

B2922, 2923, 2937, 1376, 1377
Sp. too faint.

B13757 Sp.
Good! St.?

✓ B1515, too poor.

B13802
Bright lines in sp. very faint

B14392 Sp.
not cor.

B14044
var. bright.

B16804
not coming

Feb. 27, 1907

−15° 4842

B 16517, 15833, 16414
Bright.

B 16163
Not cov.

B 17650
Bright.

B 17585
very bright

✓ B 4159 (Broken)
normal 8.7 assumed

B 27972
normal

B 33702
Normal

B 14038
normal

B 8399 Broken (f.p.), B 3696
Star probably too faint.

Feb. 27, 1907

−15° 4842

B 21945 Broken over region.

B 16570 Broken
Not covering

B 4083
Normal

B 31805
Brighter ?

B 33658
Normal

B 26115
Normal

B 9852
Normal

Feb. 28, 1907

Var. No. 4, marked "33" on AC5343

| | | No. 4 | No. 6 |
|---|---|---|---|
| | Ac 2715 | Bright | ~~Bright~~ Not seen. a seen |
| | 2778 | " | Fainter than a. |
| | 2837 | Faint. very poor pl. | Too poor. |
| | 2847 | Too poor. | |
| | 2910 | Bright. | v 1 a. |
| | 2961 | Slightly fainter than normal | v = a |
| | 3601 | Too poor | Too poor |
| May 30, 1903 | 3702 | Faint! | v 1 a |
| | 3836 | Slightly fainter | Too poor. Perhaps faint. |
| | 3851 | " | " " |
| | 3935 | Too poor | x " " |
| | 4914 | " " | " " |
| | 4980 | Bright | a 1 v |
| | 5068 | " | a 5 v |
| | 5180 | " | v = a |
| | 5211 | " | v = a |
| | 5220 | very bright. | v = a |
| Oct. 6, 1904 | 5335 | Faint. | a 5 v |
| | 6431 | Slightly faint? | Not seen. a quite distinct |
| | 6493 | " " | v 1 a |
| | 6532 | Bright. | ~~v 5 a~~ a 5 v |
| | 6565 | a 3, 2 b | a 4 v |
| | 6632 | a 3, 2 b | v 1 a |
| | 6643 | a 1, 3 b | v 4 a |
| | 6699 | a 1, 4 b | v 1 a |

Feb. 28, 1907

Cont. of preceding.

| | No. 4 | No. 6 |
|---|---|---|
| AC 6835 | a 2 v, 1 b ~~v 5 a~~ | ~~v 5 a~~ a 5 v |
| AM 1492 | v 1 a | ~~v 6 a~~ a 6 v |
| 1523 | a 4, 1 b | v = a |
| 1594 | a 1 v, 4 b | a 1 v |
| 1631 | v = a | a 6 v |
| 1874 | a 1 v 4 b | a 7 v |
| 1887 | v = a | a 6 v |
| 1993 | v 1 a | a 7 v |
| 2052 | v 1 a | a 7 v |
| 2072 | a 4 v, 1 b | a 6 v |
| 2142 | a 3 v | v 3 a ! |

Variation of No. 4 was confirmed by Mrs. Fleming and Professor Pickering. Variable No. 16 was confirmed by Mrs. Fleming. See p. 82. Variable No. 4 is either of Algol type or Class III.

March 6, 1907

Observations of var. No. 4 which is
−15° 4842.

B9277
var. normal.

B6137
var. perhaps slightly fainter

B7692
Normal

I6237 ff.
Too poor

B8714
Normal

B9277
Normal
Keep to measure sep.

B7873
Unident.

B27409
~~var. normal or perhaps~~
a 2 v

Mch. 6, 1907

−15° 4842

B27972
a 3 v

B28476
var. very bright & dense

B28655
Normal

B29526 April 2, 1902
var. faint!

B29530
Not covering.

B29256
Normal

B29854 May 27, 1902
var. faint

B29858
var. faint " "

B30039
a 2 v

Mch. 6, 1907

-15°4842

B30071
a2v

B30592
a3v

B31472 April 17, 1903
Var. faint

B32014
Not covering

B32318
May be fainter than normal
Images burned out

B32334
Images too dense,
Faint?

B32355
Normal? Too dense

B32626
Not covering

B32648
Normal

Mch. 6, 1907

-15°4842

B33658
Var. normal

B33786
Not covering

B33702
Var. normal

B33811
Not covering

B26115
Normal?

~~ac1511~~ ~~No. 5~~
~~8.4~~ ~~Too near edge,~~

~~ac1517~~

March 7, 1907

Observations of -15° 4842 (Var. No. 4, A.J.O)

Seq. measured by E. F. L

a = 8.34
b = 8.84
c = 9.12
d = 9.42
e = 9.52
f = 9.97

ac 361
Too poor.

✓ ac 780
Too poor.

✓ ac 843
8.7 No. 5
faint f 1 v

✓ ac 855
8.7 No. 3
v 1 f

✓ ac 910
Too poor.

---

Mch. 7, 1907

-15° 4842

✓ ac 929
Too poor. b barely seen, a not seen

✓ ac 1019
~~8.3~~
8.8 No. 5
v 1 c

✓ ac 1325
Can not identify

✓ ac 1390
Too poor.

✓ ac 1461
8.7 No. 5
e 3, 2 f

✓ ac 1511
8.9
Difficult, star slightly fainter than normal trailed.

✓ ac 1522
8.8 No. 5
a 2 v

✓ ac 1571
8.9 var. No. 2
c 2 v

✓ ac 1584
Too poor

March 7, 1907

Var. -15° 4842

√ ac 1621
Too poor.

√ ac 1624
Too poor.

√ ac 1632
Too poor

√ ac 1675
very poor.
8.8 No. 5
r = e

√ ac 1682
Too poor,

√ ac 1749
8.8

√ ac 1781
Too poor.

Oct. 4, 1901 √ ac 1821 No. 5
8.8 f 2 v

Oct. 11, 1901 √ ac 1859 No. 5
Too poor c 2 v

No. 5 is probably of short period.

---

March 7, 1907

-15° 4842

√ ac 2485
Too poor

√ ac 2553 No. 5
8.7 r, f

√ ac 2580
Too near edge.

√ ac 2625
Too poor.

July 8, 1902 √ ac 2673 No. 5
9.0 c 3, 1 d

Aug. 23, 1902 √ ac 2771 No. 5
8.9 f 4 v
poor plate

√ ac 2788 No. 5
8.7 c 3 v

√ ac 2815 No. 2
8.8 f 2 v

March ~~7~~ 8, 1907

Cont. of preceding estimates
var. No. 4 −15° 4842
" " 5 +1° 3877

✓ ac 3503
Too poor

✓ ac 3599
Too poor.

✓ ac 3651 — No. 5
8,8 — Too poor
very poor.

✓ ac 3693 — No. 5
9.1 — e 2, 1 f
Certainly slightly
fainter than normal

✓ ac 3725 — No. 5
8.8 — a ~~4~~ 2, 1 e

✓ ac 3787 — No. 5
9.1 — v = e
Certainly fainter

Mch. 8, 1907
−15° 4842

✓ ac 3796 — No. 5
Not evening — v = d

✓ ac 3812 — No. 5
v = d
9.2

✓ ac 3889
Too poor of both plates

✓ ac 3899
9.4
Poor plate — No. 5
c defective — f 2 v ? one third of v

✓ am 3739 — No. 5
9.0 — C 3 v
This plate shows faint stars

✓ ac 7476
9.0? — No. 5
Too poor — v = e

✓ ac 7558 — No. 5
8.8 — a 2 v

Mch. 8, 1907

−15° 4842

✓ ac 7596
8.9
No. 5
v = f

✓ ac 7662
Images blurred
8.9?
No. 5
Too near edge

ac 7719
e 2 v,
f not seen
very poor plate
No. 5
Too near edge

✓ ac 7805
8.9
No. 5
v, c

✓ ac 7855
9.1?
Images too poor.
No. 5
a 2 v

✓ ac 7954
Too poor.
No. 5
c, v

✓ am 3811
8.8
No. 5
e 2, 1 f

Mch. 8, 1907

−15° 4842

✓ am 3835
8.9
No. 5
f, v

✓ am 3882
8.5
No. 5
v = a

✓ am 3921
8.9?
Fog over region
No. 5
v = f

✓ am 4150
9.0
No. 5
v = d

✓ am 4196
Too poor of both plates

✓ am 4244
8.7
No. 5
v = e

✓ am 4271
8.7
No. 5
v, f

✓ am 4313
8.7
No. 5
v, f

Mch 8, 1907

-15° 4842

|  |  |  |
|---|---|---|
|  | ↓ am 4354<br>8.7 | no. 5<br>f, v |
| July 9, 1906 | ↓ am 4371<br>8.8 | no. 5<br>v = e |
| July 12, 1906 | ↓ am 4393<br>8.8 | no. 5<br>v, f |
| aug. 25, 1906 | ↓ am 4535<br>8.8 | no. 5<br>v, a |
|  | ↓ am 4624<br>9.1 | no. 5<br>f, v |
|  | ↓ am 1492<br>8.8 | no. 5<br>v, f |
|  | ↓ am 2142<br>8.9 | no. 5<br>v = d |
|  | ↓ am 1887<br>8.8 | v, e |

Mch 8, 1907

-15° 4842

|  |  |
|---|---|
| ↓ ac 3825<br>9.0 | no. 5<br>v, f |
| ↓ ac 5220<br>8.8 | a 3 v |
| ↓ ac 6643<br>8.9 | e, v |
| ↓ am 18~~7~~4 7<br>8.9 | f, v |
| ↓ am 1523<br>9.1 | v = e |
| ↓ ac 6565<br>9.0 | v = f |
| ↓ am 888<br>8.7 | e 2, f |
| ↓ am 875<br>9.2 | f, v |

Mch 8, 1907
-15°4842

Am 1319 — No. 5
mult. image
v 2 e
Not covering. — No change.

√ Am 921 — d 1 v
mult. images
merges into star b. — No change.
Probably at max.
No change seen
8.8?

√ Am 916 mult. image — No. 5
Image too much
mixed with others — v 1 e
No change

√ Am 3675 multiple — Too poor
~~image~~
Star fainter than b.
No change in images.

√ Am 3678 — Not seen
8.9
No change.

√ Am 1309 — Not seen
On extreme edge. Try again if needed.

---

Mch 8, 1907

I v B plates of -15°4842

√
B22791
8.7

√ B16035
8.7

√ I32080
8.7

√ I32081
8.8

√ I32082
8.7

√ I32083
8.8

√ I32084
8.7

~~B30918~~

√ I32087
Too poor.

√ I32127
8.8

√ I32134
8.8

I32135
√ 8.8

√ I32196
8.8

√ I32197
8.8

√ I32198
8.8

√ I32199
8.9

√ I32200
8.8

√ I32201
8.9

√ I32202
8.9

Mch. 8, 1907

−15° 4842

✓ I 32203
8.8

✓ I 32204
8.9

✓ I 32205
8.9

✓ I 32234
8.9

✓ I 32235
8.9

✓ I 32236
8.8

✓ I 32268
8.8

✓ I 32341
8.9

✓ I 33207
8.9
poor plate

✓ I 33215
On extreme edge.
8.8?

✓ I 25597
Too near edge

✓ I 25601
Too near edge
var. no. 6 is bright

✓ I 25602 Sp
Not covering

✓ I 25603 Sp
8.8

No. 6 not seen

✓ I 25604 Sp.
Not covering

✓ I 25599
Too poor.

✓ I 25585 Sp.
Too poor.

March 8, 1907

−15° 4842

✓ I 15379
Not covering

13h I 11158
Not covering again

✓ B 9278
8.8

✓ I 4039
On extreme edge.
Certainly faint
Very rough est. 9.2
d not on plate

✓ I 22660
Not covering

✓ I 22654
Not covering

✓ I 11234
Not covering

✓ I 6722
Too poor.

✓ I 11223
Not covering

✓ I 8708
Not covering

✓ I 6666
8.8

~~I 666~~

✓ I 6639 Sp.
Very poor but
star is seen the [illegible]
9.3?

✓✓ I 6617 Sp
8.9

✓✓ I 6588 Sp.
8.7

✓ I 6584 Sp
8.8?

✓ I 6391
Not covering

Mch 8, 1907

I 15 04442

✓ I 6274
Not covering

✓ I 5979
Not covering

✓ I 6105
✓ I 6119
✓ I 4321
✓ I 4164
✓ I 3873
✓ I 4002
✓ I 1719
✓ I 1658
Not covering

I 1690
✓ 8.7

✓ I 1661 Sp
8.7

✓ I 1594.
Not covering

I 5978
Not covering

✓ B 33488
8.7

✓ B 33859
8.7

✓ B 33922
9.1

✓ B 34680
8.6

No. 6 brighter on this plate

~~B 344~~

✓ B 34770
Not covering.

✓ B 34894
Class M
8.7

✓ B 35687
8.7

✓ B 35783
8.6

March 8, 1907

–15 04442

I 1595
Too poor

✓ I 1558
On extreme edge
8.8 ?

✓ B 6137
8.8

✓ B 29858
9.4
9.6 E. F. L.
Var at about minimum light

✓ B 32318
8.6

✓ I 32270
8.8

B 20470.
Not covering

✓ B 29526
9.4

✓ B 29854
9.4

~~B 6136~~

B 31805
8.8

No 6. very bright

✓ B 22020
8.5

✓ B 23694
8.8

✓ B 17585
8.7

✓ B 19115
9.1

✓ B 21312
9.0

No. 6 very faint

Mch. 8, 1907

−15°4842

✓ B25523
8.7

✓ B25822
8.7

✓ B25391
Not covering
No. 6 quite bright.

✓ B25122
8.7

✓ B24343
Not covering

✓ B25346
8.8
(No. 6 on extreme edge)

✓ B23215
8.7

✓ B5969
8.7

✓ B20467
8.7

✓ B8970
8.5

✓ B20450
8.7
(No. 6 very faint)

✓ B2452
8.7
(No. 6 faint)

✓ B6136 (Empty?)
8.9

B32084
8.7

✓ B23282
8.8

March 8, 1907

−15°4842

✓ I 34074
7'
8.7

✓ I 34102
8.8

✓ I 1725
Too poor.

✓ B22007
8.7

✓ I 33218
8.8

✓ B13757 Sp.
9.0

March 9, 1907

Estimates of var. −15°4842 (No. 4)

√ ac 4980
7
8.~~6~~

√ ac 4914
Too poor

√ am 1336

8.8

√ am 1353
8.8

√ am 1384
9.2 near edge.

√ am 1522
3 exposures
Aug. 25, 1902;
" 29, "
" 30, "
I see only 2 images
var. 8.7 on both.

(Variable No. 5 is very bright on one exposure and very faint on the other)

√ am 1594
8.8

√ am 1631
8.7

√ am 1993
8.7

√ am 2052
8.8

√ am 2072
9.0

√ am 2184
9.0

√ am 2200
8.9
b defective?

√ am 2335
10.1
This is the faintest yet observed.

March 9, 1907.

−15°4842

√ am 2533
~~8.8~~
8.6

√ am 2653
8.8

√ am 2661
8.8

(No. 5 evidently grows very faint, as there is no trace of it on this plate.)

√ am 2702
8.7

√ am 2725
8.5

√ am 2827
8.7

√ am 2856
8.9

√ ac 377
8.8

√ ac 471
Too poor.

√ ac 858

8.7

√ ac 868
8.5
var. certainly very bright

√ ac 869
Too poor.

ac 948
not cov.

√ ac 936
Too poor.

√ ac 963
Too poor.
8.9?

March 9, 1907

−15° 4842

✓ ac 1462
8.7

ac 1475
✓ Too poor.
8.8?

ac 1501
✓ Too poor
Var appears
fainter than
normal.
9.0?

✓ ac 1527
8.7

✓ ac 1542
Too poor.

✓ ac 1618
8.7

✓ ac 1655
8.8

✓ ac 1699
Too poor.

✓ ac 1722
8.5

✓ ac 1780
9.2?
Very poor plate.
certainly faint.

✓ ac 1828
not ident.

✓ ac 1840
8.6

ac 2521
not covering

✓ ac 2568
8.5

✓ ac 2612
9.0

✓ ac 2655
8.8

✓ ac 2697
8.8

Mch 9, 1907

−15° 4842

✓ ac 2715
8.6

✓ ac 2778
8.7

✓ ac 2847
Too poor.

✓ ac 2910
8.8

✓ ac 3601
8.6?
Very poor pl.

✓ ac 3851
9.1

✓ ac 3935
Too poor.

✓ ac 5042
8.8

✓ ac 5068
8.8

✓ ac 5180
8.4

✓ ac 5211
8.5

✓ ac 6358
Too poor.

✓ ac 6431
8.8

✓ ac 6459
Too poor.

✓ ac 6493
8.9

✓ ac 6632
9.1

✓ ac 6699
8.8

Mch. 9, 1907

−15°4842

✓ ac6835
8.9

✓ ac7491
Too poor.

✓ ac7681
8.6

✓ ac7726
8.8

✓ ac7738
8.7

✓ ac7801
8.5

✓ ac7905
9.1

✓ am46
8.8?
Fainter.

✓ am68
Too poor

✓ am75
8.8

✓ am 87
9.1

✓ am104
9.1

✓ am116
9.1

✓ am204
8.8

✓ am239
9.0

✓ am433
Too poor

✓ am571
Too poor

✓ am539
8.7

Mch 9, 1907

−15°4842

✓ am566
8.8

✓ am685
8.5

✓ am835
8.8

✓ am850
8.7

✓ am868
9.0

✓ am919
Mult. image

✓ am959
8.6

✓ am1010
8.6

✓ am1191
8.7

✓ am1203
9.2

✓ am1297
8.7

✓ am2989
8.4

✓ am3081
8.7

✓ am3099
8.8

am3175
8.8

✓ am 3443
8.8

✓ am 3515
8.9

Mch 9, 1907

−15° 4842

√ Am 3587
9.0

√ Am 3631
8.9

√ Am 3647
8.7

√ Am 3677
8.9
Multi. image
No change

√ Am 3711
9.1

√ Am {3742
{3743
9.0

√ Am 3764
8.9

√ Am 3891
8.7

√ Am 3953
8.8

√ Am 4176
8.8

√ Am 4260
8.7

√ Am 4296
8.7

√ Am 4335
8.8

√ Am 4368
8.8

√ Am 4473

8.7

Am 4506
Too poor.
Prob. not comm

Mch. 9, 1907

−15° 4842

√ Am 4514
8.7

√ Am 4555
Class M.
Too poor

√ Am 4601
8.9

√ Am 4648
8.7

√ AC 7610
On extreme edge.
8.8

Monday, March 11, 1907

In selecting sequence for Var. No. 5, +1° 3877, I noticed ~~that~~ a star near by is brighter on I 23346 than on AM 2335.

new. This is +1° 3899, 7.5m, 18h 59m.48 +1° 4.1 (1855)

Examination of several AC or AM plates to confirm variation of this object.

| Faint on | | Bright on | |
|---|---|---|---|
| AC 2335 | | Am 3647 | |
| AC 5068 | | Am 2745 | mult. image no variation |
| Am 3677 | mult. image | Am 2143 | " " " |
| Am 1436 | no variation | Am 2619 | |
| Am 3631 | | Am 2661 | |
| Am 2725 | | | |
| Am 2652 | | | |

This star appears to be certainly variable with range of one magnitude or more.

Confirmed on I plates.

| Faint on | Bright on |
|---|---|
| I 27343, Aug. 22, 1901 | I 27319 Aug. ~~22~~ 16, 1901 |

Period short.

March 11, 1907

Identification of two new variables and other objects found ~~several days ago~~ on March 6 on "AC 2619", taken May 5, 1904

1. This appears to be an image of something but is of different shape from the stars. Not on positive but moderately bright on AC 2619. Perhaps an asteroid.
Not on Am 1036,
" " Am 2573, taken April 22, 1904.
Probably a defect.

2. A defect ~~on~~ almost exactly on top of a star. The shape differs from the stars. It makes the star appear much brighter but it is no brighter on
Am 4655 not seen on Am 4986
Am 4463 AC 5340
Assumed to be a defect

3. Brighter on negative.

Known
R Aquilae

Mch 11, 1907

Cont. of preceding.

4. variable. Same as No. 23 on AM 1448
Variable No. 5, A.f.C. +1°3877
see p. 81.

5. Certainly variable.

Known RY Ophiuchi.

6. On negative not on positive
Invis. on AC 5354, which shows faint stars
—var Present and very faint on AM 1436

New. Var. No. 7.
17h 49 +3 30′
(1855)

Invisible on AM 4463, AC 4986
Moderately bright on AM 4655
Bright on AM 4546.
" " AM 2619

Variability conf. by L. D. Wells.

Invisible B 29856 object seen. marked.
I 15396 These plates confirm the variation.
I 18679 B 30041, object fainter than on
I 8745 B 29856.
I 16516 bright on B 23659
I 23017 very bright on AC 5210

---

Mch. 11, 1907.
Cont. of preceding

7. On negative, not on positive.
Invisible on Am 4546, Am 4655, AC 4923
Barely seen on AC 6544
Faint on AM 4463
Fairly bright on Am 2767
Invisible on Am 1436.

AC 7476
7550
7596
7662
7719
7805
7855
7954

These plates do not show this object. They are very poor, however, and not much conclusion can be drawn from the star's absence

Am 3882 star very faint.
3921 not seen, very poor pl.
Am 4393 star not seen
Am 3739 very faint.
Am 4371 " "
Am 4354 " "
Am 4313 not seen

New var. No. 8
17 26.1 −1°0
roughly. (1855)

Approximate position 1855
17h 26.1 −1°0
Faint on I 31,856 taken July 13, 1904.
Fairly bright on B 23965
" " " B 29821
Faint on I 8808.

Variability confirmed by L. D. Wells.

March 12, 1907.

Continuation of observations of variable No. 4, −15° 4842 (cont from p. 125)

√ B36470
8.9

√ B36790
8.9

√ I31907
8.8

√ I31910
8.8

√ I31911
8.8

√ I32071
Too poor.

√ I32078
8.7

√ I32079
8.7

√ B631 Sp.
Too poor

√ B672 Sp.
Too poor

√ B688 Sp.
Too poor

√ B697 Sp
Too poor.

√ I1200
Not covering

√ B31472
9.2

√ B33445
Class S
8.8

---

March 12, 1907

−15° 4842

√ B29614
Class S
8,8

√ B28540
Class S
9.0

√ B8642 Sp.
8.7
The sp. is brighter than sp. f.b.
b is Class A or B.

√ B8383 Sp.
8.8

√ B8410 Sp.
Not covering

√ B8375 Sp
Not covering

√ B8383 Sp
Not covering.

√ B7703 Sp
Too poor

√ B7693
8.8

√ B7711
Too poor & near edge.

B7872
√ 9.2
Certainly fainter than normal

√ B7720
Not covering.

√ B770 Sp.
Too poor.

√ B614
Too poor.

March 12, 1907

Cont. of estimates of −15° 4842

√ Ac 283
8.8

√ Ac 301
8.7

√ Ac 343
8.8

√ Ac 409
Too poor.

Ac 756, Ac 808
not covering

Ac 892, Ac 947
not covering

√ Ac 1363
Too poor

Ac 1458, Ac 1500
not covering

√ Ac 1728
8.6 near edge
& looks faint
on this plate,
perhaps it varies too

√ Ac 2452
Too near edge.

√ Ac 2520
8.8

√ Ac 2577
Too poor

√ Ac 2582
8.8

√ Ac 2616
Too poor

√ Ac 2658
8.7

March 12, 1907

−15° 4842

√ Ac 2686
8.9

√ Ac 3526
not covering

√ Ac 3538
near edge
9.1

Ac 3556, Ac 3576
not covering

Not covering
Ac 3650
Ac 3666
Ac 4905
Ac 4948
Ac 5105
Ac 5989
Ac 6148
Ac 6261
Ac 6392

√ Ac 3676
Too poor

√ Ac 3682
8.8

√ Ac 3723
8.7

√ Ac 4746
8.8

√ Ac 4827
Too poor.

√ Ac 4958
8.9

√ Ac 5027
Too poor.

√ Ac 6061
Too poor.

√ Ac 6234
Too near edge.

March 12, 1907

−15° 4842

✓ ac 6281
Star faint
9.4

On extreme edge
e & f not on plate

✓ ac 6466
8.9
near edge.

✓ ac 6488
8.8

✓ ac 6492
8.9?
Too poor.

✓ ac 7490
8.8

✓ ac 7561
Too poor.

✓ ac 7595
8.8

✓ ac 7610
8.9

✓ ac 7665
Too near edge

✓ ac 7701
not covering.

✓ ac 7757
Too poor & near edge.

March 14, 1907

Cont of estimates of −15° 4842

✓ Am 61
8.8

✓ am 72
9.0

✓ Am 115
9.0

✓ Am 232
8.9

✓ am 420
8.6

✓ Am 439
Too poor.

✓ Am 505
8.7

✓ Am 546
8.7

✓ Am 841
9.1

✓ Am ~~858~~ 855
8.8

✓ Am 987
8.8

✓ Am 1175
8.7

✓ Am 1193
9.0.
Too near edge.

✓ Am 1325
9.3

✓ Am 1350
8.8

✓ Am 1381
9.1

✓ Am 1396
8.5

Am 1703
Unidentified

Mch. 14, 1907

–15° 4842

✓ Am 1873
8.9

✓ Am 1880
8.7

✓ Am 1890
8.8

✓ Am 2025
faint
9.5

✓ Am 2060
8.7

✓ Am 2079
8.6

✓ Am 2176
9.0

✓ Am 2190
8.9

✓ Am 2524
8.6

✓ Am 2563
9.2

✓ Am 2616
8.7

✓ Am 2637
8.9

✓ Am 2692
8.8
defect over variable.

✓ Am 2757
8.8

✓ Am 2816
8.7

✓ Am 2833
Three ~~exper~~ images found
8.8 no change

✓ Am 2883
8.8

Am 2896
8.7

---

March 1~~4~~5, 1907

–15° 4842

✓ Am 3049
8.9

✓ Am 3414
8.9

✓ Am 3435
8.9

✓ Am 3514
8.7

✓ Am 3551
8.8

✓ Am 3560
8.8

✓ Am 3576
8.9

Am 3603
✓ Mult.
Last image seems fainter
Measured each image
sep. 138

✓ Am 3640
8.8

✓ Am 3750
9.1

✓ Am 3792
9.0

✓ Am 3890
8.8

✓ Am 4175
8.9?
very near edge

✓ Am 4227
8.8

✓ Am 4283
8.8

Am 2989

P. 123

March 15, 1907.

−15°48'42"

✓ Ac 8306
Not coming

✓ Am 4312

8.7

✓ Am 4319
8.7

Am 4348
Mult. image
Reserve

✓ Am 4386
8.7

✓ Am 4462
8.8

✓ Am 4471
8.8

✓ Am 4513
8.8

✓ Am 4599
9.4

Am 3603 ✓
5 images
(1.) 8.8
(2.) 8.8
(3.) 8.9
(4.) 9.0
(5.) 9.2 ?
Last image certainly fainter.

✓ Am 4348
Mult. image
8.8
no variation

✓ Am 956
Two images
1. 9.2
2. 9.2

Am 4955
8.8

✓ Ac 5042
8.7

Am 3631
8.8

March 15, 1907

−15°48'42"

✓ Ac 5068
8.8

✓ Am 3647
8.8

✓ Am 1874
8.8
(Var. No. 6 is very faint on this plate)

✓ Am 875
9.1

✓ Am 888
8.7

✓ Ac 6565
8.9

Am 1523
9.0

✓ Ac 6643
8.8

✓ Ac 5220
8.7

✓ Ac 3825
9.0

✓ Am 1887
8.8

✓ Am 2142
8.8

✓ Am 1492
8.7

✓ Ac 5098
Too poor

✓ Ac 5199
8.7

✓ Ac 5561
Too poor

✓ Ac 6124
Too poor

Ac 6156
Too poor

✓ Ac 6246
Too poor

March 15, 1907

−15° 4842

✓ Ac 6476
Too poor

✓ Ac 6758
8.8
very poor

✓ Ac 6863
8.9

✓ Ac 7048
Too poor

✓ Am 10
9.0

✓ Am 28
9.0

✓ Am 153
8.9

Am 402
Probably not varying

✓ Am 403, Am 473
not varying

Ac 4986
8.7

✓ Am 2796
8.9

✓ Ac 6576
9.2

✓ Ac 5227
8.7

✓ Ac 1730
8.5

✓ Am ~~4545~~ 4546
8.4

✓ Am 1436
9.2

✓ Am 1448
8.7

✓ Ac 4923
8.9

March 15, 1907

−15° 4842

✓ Ac 5343
9.3

✓ Am 1918
8.7

✓ Am 4624
9.1

✓ Am 4463
8.7

✓ Am 3811
8.8

Ac 6544
9.0

✓ Am 1051
8.5

✓ Am 3561
8.9

✓ Am 2707
8.6

✓ Am 4655
8.8

✓ Am 4371
8.8

Ac 6544
9.0

✓ Am 4535
8.7

✓ Am 2143
mult. images
very much mixed
with other stars.
No variation seen
Obs. uncertain
8.9?

Ac 1325

✓ Ac 360
9.0

✓ Ac 6532
9.0

March 15, 1907

−15°4842

✓ ac 5335
9.1

✓ ac 2837
Plate badly fogged.
Star faint;
very rough est.
9.2?

✓ ac 2961
9.0

✓ ac 3836
9.1

✓ ac 3702
9.5

✓ B2 3025 Sp.
8.8
Spectrum shows G band
Sp. of + is A or B

B2 1257 Sp.
✓ Best of spectrum
A5 F? lines narrow.

8.9.

✓ Am 2660
8.8

✓ Am 2619
8.7

Am 4535
8.8

✓ Am 2745 mult
Images too confused

✓ Am 2725
8.7

✓ Am 3677
Mult.
9.1 no variation

Am 4410
Mult.
✓ too difficult.
Last two images
seem fainter

March 15, 1907

−15°4842

Broken plate

✓ Am 2319
8.9

✓ Am 2034
8.8

✓ ac 3777
Too poor.

✓ B3 2340
8.8

✓ Am 1510
8.7

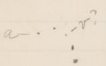
✓ Am 761
Too near edge

# Tuesday, March 19, 1907

Identification of objects marked on AM 1522, of which there are two images of each object.

(1) +1°3877, southern image very bright, northern image almost gone. Already found on AC and confirmed as a short period variable.

(2) Upper image missing or very faint. Approximately equal to a on several plates.



| Faint on | Equal to a |
|---|---|
| AC 6576 poor plate | AM 2660 |
| AC 6544? | AC 1730 |
| AC 6565 | AM 1436 |
| | AM 2335 |
| These three plates | AM 4371 |
| show this star | AM 2767 |
| slightly fainter | AM 3561 |
| than normal. | or perhaps slightly fainter than a |
| and I think it | |
| must be variable | AM 1657 |
| | AM 4923 |
| | AC 5327 |
| | AM 2796 |
| | AM 4986 |

B 23344, 26427, 28153 star marked.
30193 examined.
No change.

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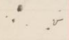
## March 19, 1907

Cont. of preceding.

3. Quite a bright star by lower image but there is no northern image.



| new | Confirmed Faint on | Medium brightness | Bright |
|---|---|---|---|
| -5°4734 | AC 6565 | AM 4535 | AC 6576 |
| 9.3m | AM 4463 | | AC 4980. |
| 18h 35m 11.2 | AM 2619 | | ~~AM 2653~~ |
| -5° 58.2 | AC 6544 | | |
| (1855) | AM 2653 | | |

No. 10. Certainly variable to extent of 1 magn., may be more.
Marked on ~~E~~ I 20925

4. A bright star, fainter image not seen.

| new | Faint on | Bright on |
|---|---|---|
| -8°4663 | AM 2619 | AM 3811 |
| 9.7m | AM 4371 | AM 4548 |
| 18 30 9.2 | ~~AM 2767~~ | AM 2767 |
| -8° 29.3 | | AC 4923 |
| 1855 | | AM 2798 |

No. 11
Marked on I 20925
Confirmed on B plates.
Bright on B 33625 Faint on B 36048.
" " B 36921
Confirmed by W. P. F. March 25, 1907.

March 20, 1907

Cont. of preceding

5. Precedes 4, appears fainter on northern image.

-8°4652 Am 2335 }
Am 2660 } No change. Am 3561
18 28 46.8 Am 2619 }
-8 17.7 AC 6565 }
9.2 Am 4546 }
Am 2767

A little brighter on Am 45~~7~~35, Am 4371
" " fainter on Am 888

Certainly a little brighter on Am 2796

I think this is variable but it must be confirmed by some one else, or on B plates before announcing

Examined on B 33625
B 32318
B 32184
B 33811
B 34248
B 36921
B 36048
B 36086

Confirm on other plates. The variation shown on these plates is not more than 0.5 mag. and may not be real.

very little if any variation appears by comparison

A slight change B 36048 and B 32184.

March 25, 1907.
B 36048 is an
Inferior plate and this
probably accounts for
the increased brightness
of -8°4652.

March 20, 1907
Cont. of preceding

E. The northern image looks too faint. This may be due to nearness of very bright star.

No change on Am 2725, 888 AC 6565, AC 2335, Am 3811

## March 21, 1907

Am 4463 superposed on positive D.

Known. 1. R Aquilae — Brighter on positive
Invisible on negative

Known. (2) X Ophiuchi — Brighter on negative

Known (3) RV Ophiuchi — Bright on positive
missing on negative

(4) Faint star, brighter on ~~negative~~ positive
Positive badly scratched at this point

Bright on Am 3561, 2660. AM 918

jr

18 34.1 +6 20 (1855) very rough — Faint on Am 4535, Ac 5343
This does not show a very great change but I think it is real
Not a DM star

## March 23, 1907

Examination of plates to confirm variation of 2 stars found on Am 4663.

5 = +8° 4965 9.3 = Var. No. 12

6 = −13° 4971 9.3

5 was thought to be fainter on Am 4663 than on positive. 6 was seen to be missing on Am 2660 when looking up 5. A defect appears in the position of No. 6.

| | No. 5 | No. 6 |
|---|---|---|
| Am 800 | Bright | Bright |
| Am 897 | Faint | " |

March 23, 1907

Examination of plates to confirm variation of object marked on Am 4663 which identifies as -10° 4817$^{4}$

Var. bright on
Ac 5343 Ac 2619, Ac 2767, Ac 3811, Ac 3561, Ac 2660, Ac 4546, Ac 49863 ~~Ac 2725~~, Am 888, Am 2725, Am 1436, Am 1051, Am 4371, Am 4624

Bright on B 36062 B 36473 B 5998
B 6116, B 6117? perhaps slightly fainter.
Faint on Ac 6544
Faint on B 7880. } taken June 10, 1892
" " B 7879 }
" " B 10038. July 31, 1893

B 10113 Sp. Too faint.
B 10114 " Too poor to determine class

This is probably an Algol variable.

Variability confirmed by M. P. F. March 25, 1907, with range of about 0.9 mag. on B 7879, B 7880, B 36062.

Also confirmed by L. D. W. on March 23, 1907.

---

March 23, 1907

See also Bk. 18, 5

Examination of plates to confirm variability of object marked on Am 4663 (see p. 148. Object 4.
18 34.1 +6 20 (1855) rough

I 31788. v 2 a (var. marked
I 31994 v 2 a
I 31904 v 2 a
I 31041 not covering.
I 28884 v 2 a
I 27185 v 2 a
I 23739 v 3 a
I 23670 v 3 a
I 23213 v 3 a
I 23093 v 3 a

Variation not confirmed on these plates. I think however that this star is variable and more I on B plates must be examined.

Variability confirmed by L. D. W. on April 4 1907, by examination of the following plates. She thinks more plates should be examined. Range bet. 0.5 and 1.0
B 31688 star bright
I 31788 " faint.
B 6120, B 8468, ~~B 468~~. B 17446, B 20468, B 31958, B 32403 bright, B 36162

March 23, 1907.

Examination of plates to confirm variability of objects marked 5 & 6 on p. 149.

Var. No. 12 No. 5 = -13° 4965 $9.3^m$
No. 6 = -13° 4971 $9.3^m$

The following plates were examined for both stars. No. 6 was of normal brightness on all these plates, and I therefore assume that the image on Am 2660 is defective.

-13° 4965

| | | | |
|---|---|---|---|
| Am 1424 | Normal Brightness | Am 2958 | Faint |
| 1287 | " | 2915 | Normal |
| 1270 | " | 2855 | " |
| 1251 | " | 2714 | " |
| 1542 | " | 2279 | " |
| 1553 | " | 2260 | " |
| 1554 | " | 2245 | " |
| 1953 | " | 2137 | " |
| 1483 | " | 2119 | Faint |
| Ac 5058 | " | 1021 | Bright |
| Am 3835 | " | Ac 360 | " |
| Ac 3899 | " | 3977 | Faint? |
| 1518 | " | 5199 | Bright |
| 1546 | " | 6537 | " |
| 6323 | " | 67~~88~~13 | " |
| 6393 | " | 7719 | Faint? |
| | | 6863 | Faint |

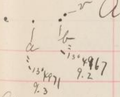
March 23, 1907
Cont. of preceding.

No. 12. -13° 4965

| | |
|---|---|
| Ac 7805 | Faint? |
| 7855 | ? |
| Am 3882 | Bright |
| 3921 | " |
| Ac 3693 | " |
| Ac 3725 | " |
| " 3789 | " |
| " 3812 | " |

This is probably an Algol variable.

Additional plates



Assume a = 9.3
b = ~~9~~ 9.8

-13° 4965

| | | |
|---|---|---|
| B 21285 | Apr. 26, 1898 | 9.4 |
| B 14038 | | 9.3 |
| B 14083 | | 9.3 |

## March 25, 1907

Examination of additional plates of variables -13°4965 and the suspected Algol -13°4971.

| | -13 4965 | -13 4971 |
|---|---|---|
| ac 3693 | Bright | Bright |
| am 3811 | " | " |
| am 2767 | " | " |
| am 2619 | " | " |
| am 3561 | " | " |
| am 6565 | Faint | " |
| am 2335 | Bright | " |
| am 2725 | Faint | " |
| am 4546 | Bright | " |
| ac 5227 | " | " |
| am 1436 | " | " |
| ac 4923 | Fainter than normal | Fainter? |
| am 1057 | Bright | Bright |
| am 4371 | " | " |
| ac 1730 | Too poor | " |
| am 4624 | Bright | " |
| ab 4986 | " | " |
| am 886 | " | " |
| am 4535 | | " |
| am 2958 | Faint | Bright |

March 25, 1907

Examination of additional plates for variable -15°4842

√ B 19327
8.8

√ B 26115
9.0

√ B 27972
8.8

√ B 31805
8.7

√ B 33702
8.8

√ B 33658
8.7

√ B 9852
not covering

√ B 14038
8 7

√ B 14083
8.8

√ B 14044
8.7

√ B 16517
8.7

√ B 16414
8.7

√ B 16833
8.8

√ B 17650
9.0

√ B 2408
8.8

√ B 4027
8.8

√ B 21076
8.6

---

March 25, 1907 (Cont.)

√ B 3994
8.7

B 3939
Too Poor

√ B 3753
8.7

√ B 22902
8.8. Sp.

√ B 22702
8.9

√ B 21518
8.8

√ B 21550
8.8

√ B 21681
8.8

√ B 23661
8.9

March 26, 1907

Estimates of variables +1° 3877 and +1° 3899, Nos. 5 and 9 of A. J. C's list:

~~st~~

Sequence measured

a 6.9 ✓
b 7.7 ✓
c 8.3 ✓
d 8.8 ✓
e 8.9 ✓
f 9.1 ✓
g 9.4 ✓
h 9.7 ✓
k 9.8 ✓
l 10.3 ✓
m 10.6 ✓
n 11.2 ✓
o 11.5 ✓
p 12.1 ✓

I 184583
$v_1$
✓ 9.1
✓ $v_2$ 8.3

I 15488
✓ v 1
10.4
✓ v 2 8.3

I 15324
v.1 8.9
v.2 $8.8^3$

I 27319
✓ v.1 9.7
✓ v.2 7.6

I 23291
✓ v.1 10.0
✓ v.2 8.4

B 17976
✓ v 1 8.9
✓ v 2 8.8

I 28991
✓ v 1 8.9 Near edge
✓ v 2 8.3

March 26, 1907 (Cont)

Nos. 5 and 9

I 28668
✓ v 1 9.4
✓ v 2 8.9

I 32072
✓ v.1 9.7
✓ v.2 8.9

I 31994
✓ v.1 10.3
✓ v.2 8.7

✓ I 31884
v 1 9.7
✓ v 2 8.9

I 31801
✓ v 1 9.9
✓ v 2 ~~8.2~~
8.8

I 33295
✓ v 1 9.4
✓ ~~v 2 9.5~~
v 2 8.6

I 9339
✓ v 1 9.7
✓ v 2 8.9

B
~~I~~ 6520
✓ v 1 9.9
✓ v 2 7.6 Poor plate

B 36436
✓ v 1 9.4
✓ v 2 9.0

B 36472
✓ v 1 10.5
✓ v 2 8.9

B 32157
✓ v 1 10.2
✓ v 2 8.9

B 32187
✓ v 1 10.3
✓ v 2 8.9

B 32399
✓ v 1 9.7
✓ v 2 8.9

March 26, 1907, (Cont)

Nos. 5 and 9

B32404
✓ v1 9.8
✓ v2 8.8

B33497
✓ v1 8.9
✓ v2 8.3

B17555
✓ v1 9.7
✓ v2 7.8

B17688
✓ v1 10.0
✓ v2 9.1

B12544
✓ v1 9.4
✓ v2 8.3

B13589
✓ v1 9.9
✓ v2 8.5

B13631
✓ v1 10.1
✓ v2 8.9

B7609 Too poor
✓ v1
v2
✓ B7608 Too poor

B8471
✓ v1 10.1
✓ v2 8.9

B8472
✓ v1 9.9
✓ v2 9.1

B9235
✓ v1 9.6
✓ v2 9.0

B9236
✓ v1 9.6
✓ v2 8.8 very dense

B9914
✓ v1 9.1
✓ v2 8.3

B9915
✓ v1 9.4
✓ v2 8.5

---

March 26, 1907 (Cont)

Nos. 5 and 9

B21967
✓ v1 10.3
✓ v2 9.0

B19382
✓ v1 10.1
✓ v2 8.9

B19594
✓ v1 10.4
✓ v2 8.5

B19513
✓ v1 10.2
✓ v2 7.7 ? very dense

B14085
✓ v1 9.8
✓ v2 8.3 ?

B16195
✓ v1 10.4
✓ v2 9.0

~~1938~~
B19845
✓ v1 9.7
✓ v2 8.9

B20613
✓ v1 9.4
✓ v2 8.3 ?

B16291
✓ v1 10.5
✓ v2 9.1

B16683
✓ v1 9.0
✓ v2 8.8

B16941
✓ v1 9.8
v2 8.8

B25394
✓ v1 10.3
✓ v2 8.5

B25825
✓ v1 10.0
✓ v2 8.5

B17044 Cp.
✓ v1 ~~9.6~~ 10.2
✓ v2 8.5

March 26, 1907

[illegible]

B17044
Sp. 7 comp. stars
a = A or B
b = F
c = A or B
d = A or B
e = K or K5M
f = A or B
g = A or B,
others too faint.

B14665 Sp.
✓ $v_1$ 8.9
✓ $v_2$ 7.7

B13424 Sp.
✓ $v_1$ 9.4
✓ $v_2$ 9.0
This is a good spectrum plate, as compared with B14665 the spectrum of $v_2$ appears to have lost light only in the violet, or from Hζ to end of shorter wavelength

B14665
a = A or B
b = F5 G
c = A
d = A or B
e = K marked absorption
f = A or B A on B13424
g = A or B
$v_1$ too much superposed on d
$v_2$ = G.

B13464 Sp.
✓ $v_1$ not seen
✓ < 9.7
$v_2$ 7.6
Sp. G?
Brightness uniform 4227 not very strong.

B13813 Sp
✓ $v_1$ 9.5
✓ $v_2$ 8.9
The spectrum looks almost exactly like that of e

March 27, 1907 (Cont)

[illegible]

B30073
✓ v1 10.5
✓ v2 8.2

B33591
✓ v1 10.3
✓ v2 8.3

B33684
✓ v1 ~~9.4~~ 9.7
✓ v2 8.4

B33703
✓ v1 8.8
✓ v2 8.5

B33957
✓ v1 10.3
✓ v2 8.8

B36063
✓ v1 10.4
✓ v2 8.4

B36163
✓ v1 9.7
✓ v2 8.5

B36213
✓ v1 10.2
✓ v2 7.7

B28362
✓ v1 10.4
✓ v2 9.1

B28499
✓ v1 9.7
✓ v2 8.9

B28625
✓ v1 10.3
✓ v2 8.9

B29576
✓ v1 9.7
✓ v2 9.1

B36871
✓ v1 10.2
✓ v2 9.0

B36982
✓ v1 8.8
✓ v2 9.0

March 27, 1907 (cont.)

Nos 5 & 9

B37198
✓ v1 10.5
✓ v2 7.7

B37200
✓ v1 10.5
✓ v2 7.7

B34406
✓ v1 10.2
✓ v2 8.9

B34376
✓ v1 9.7
✓ v2 9.0

B33930
✓ v1 10.3
✓ v2 8.7

B36231
✓ v1 9.9
✓ v2 8.0

B29577
✓ v1 9.7
✓ v2 8.7

B29658
✓ v1 10.3
✓ v2 8.9

B29707
✓ v1 10.2
✓ v2 8.9

B29860
✓ v1 10.3
✓ v2 8.9

B29861
✓ v1 10.3
✓ v2 9.0

B29916 Clear S
✓ v1 10.3
✓ v2 7.7

B31737
✓ v1 10.5
✓ v2 8.8

B31821
✓ v1 9.9
✓ v2 8.9

March 27, 1907

~~[illegible]~~ Nos. 5 and 9

B31957
✓ v1 9.6
✓ v2 8.8

B27618
✓ v1 10.1
✓ v2 8.5

B27519
✓ v1 9.8
✓ v2 8.9

B26143
✓ v1 9.8
✓ v2 9.1

B25430
✓ v1 10.5
✓ v2 8.8

B23847
✓ v1 9.6
✓ v2 8.9

B21320
✓ v1 10.4
✓ v2 9.0

B21520
✓ v1 9.8
✓ v2 8.9

B21683
✓ v1 9.7
✓ v2 8.9

B30649
✓ v1 10.2
✓ v2 8.9 ?

B27486
✓ v1 9.7
✓ v2 8.3

B27792
✓ v1 9.5
✓ v2 8.8

B27975
✓ v1 10.4
✓ v2 8.9

B22704
✓ v1 9.6
✓ v2 8.5

March 27, 1907

Nos. 5 and 9

✓ B23130
V1 8.8
✓ V2 8.4

B23364
✓ V1 8.7
✓ V2 8.2

B23365
✓ V1 8.9
✓ V2 8.4

B23503
✓ V1 10.4
✓ V2 8.9

I-
B23215
✓ V1 9.5
✓ V2 8.8

~~I~~
I23184
✓ V1 10.4
✓ V2 8.8

I23290
✓ V1 10.2
✓ V2 8.3

I24079
✓ V1 10.4 very poor
✓ V2 9.0

I25538
✓ V1 10.2
✓ V2 8.8

I18255
✓ V1 10.2
✓ V2 8.8

I27740
✓ V1 9.5
✓ V2 8.9

✓ I25786 } not identified
✓ I25787 }

I27637
✓ V1 9.8
✓ V2 8.5

I25963
✓ V1 10.2
✓ V2 8.0

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Nos. 5 and 9

I26130
✓ V1 10.0
✓ V2 9.0

I27425
✓ V1 9.4
✓ V2 8.6

B31994
V1
V2 Focus plate

I15454
✓ V1 9.7
✓ V2 9.0

I17660
V1 9.7
V2 8.7

I18142
✓ V1 9.8
✓ V2 8.5

I25533
✓ V1 9.8
✓ V2 9.0

I18450
✓ Too poor

I16066
✓ V1 9.3
✓ V2 8.9

I16547
✓ V1 10.3
✓ V2 7.5

I15412
V1
✓ V2 not coming

I15777
✓ V1 9.2
✓ V2 7.7

I15413
✓ V1 10.4
✓ V2 7.6

I15925
✓ V1 9.6
✓ V2 8.8

March 27, 1907

Nos 5 & 9

B6000
✓ V1 10.5
✓ V2 7.8

B6003
✓ V1 10.4
✓ V2 7.7

B6119
✓ V1 not covering
V2

B6163
✓ V1 not covering
V2

B6221 Sp
✓ V1
V2

B6687
✓ V1 10.3
✓ V2 8.3

B15181
✓ V1 10.5
✓ V2 8.9

L15256
✓ V1 9.4
✓ V2 8.3 ? C off plate

L13347
✓ V1 9.3
✓ V2 8.5

L11419
✓ V1 9.6
✓ V2 8.1

L11357
✓ V1 10.1
✓ V2 8.3

L11185
✓ V1 9.4
✓ V2 8.9

L8752
✓ V1 10.2
✓ V2 7.7

L8843
✓ V1 10.0
✓ V2 9.0

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Nos 5 & 9.

L8869
✓ V1 9.4
✓ V2 8.9

L8899
✓ V1 9.3
✓ V2 8.9

L8986
✓ V1 9.8
✓ V2 8.7

L8987
✓ V1 9.7
✓ V2 8.3

L9138
✓ V1 Too poor
V2

L9340
✓ V1 9.6
✓ V2 8.7

L6647
✓ V1 10.0
✓ V2 8.8

L6612
✓ V1 10.2
✓ V2 7.5

L4122
✓ V1 10.2
✓ V2 9.0

L4108
✓ V1 Too poor
V2

B2655
✓ V1 not covering
V2

B2656
✓ V1 9.7
✓ V2 9.1

L1734
✓ V1 9.6
✓ V2 Off plate

L1739
✓ V1 9.7
✓ V2 8.8 ? Both on extreme edge

March 27, 1907.

Nos. 5 & 9

l1742
✓ V1 not covering
V2

l2083
✓ V1 10.3 on edge
V2 not on plate

l2252
✓ V1 Too near edge
V2

l2348
V1 10.2
✓ V2 Off plate

l 2369
✓ V1 10.3 Near edge
V2 Off plate

l3974
✓ V1 10.2
✓ V2 7.7

B3013
✓ V1 10.3
✓ V2 8.9

✓ B3015
V1 Off plate
✓ V2 8.8 ?,

✓ B1663
Too poor

✓ B1710
Too poor

ac 94
✓ V1 10.0
✓ V2 7.5

ac 297
✓ V1 10.4
✓ V2 8.8

ac 346
✓ V1 9.6 1st image
V2 9.5 2nd "
✓ V2 7.5 1st "
V2 7.5 2nd image

ac 378
✓ V1 10.3 ~~1st image~~
~~V1~~ ~~2 "~~
✓ V2 8.3 ~~1~~ "
~~V2~~ ~~2~~ "

March 27, 1907

Nos. 5 & 9.

ac 809
✓ V1 9.5
✓ V2 7.7

ac 882
✓ V1 9.8 ? Too poor
✓ V2 8.9

ac 961
✓ V1 Too poor
V2

✓ ac 962
V1
V2 Too poor

ac 1459
✓ Multiple image

ac 1492
✓ V1 Too poor
✓ V2 8.9

ac 1660
✓ V1 Too poor
✓ V2 7.5

ac 1688
✓ V1 Too poor
✓ V2 8.8

ac 1717
✓ V1 9.5
✓ V2 8.9

ac 1723
✓ V1 9.7
✓ V2 9.0

ac 1814
✓ V1 Too poor
✓ V2 8.8

ac 1849
✓ V1 8.9
✓ V2 8.8

ac 1862
✓ V1 10.2
✓ V2 8.7

ac 1926
✓ V1 9.8
✓ V2 8.8

ac 1940
✓ V1 10.3
✓ V2 9.1

March 27, 1907 (cont).

Nos. 5 & 9.

ac 2029
√ V1 9.5
√ V2 9.0

√ ac 2036
Too poor

√ ac 2041
V1 Too poor
V2 7.6

ac 2052
√ V1 Too poor
√ V2 7.6

ac 2061
√ V1 Too poor
V2 7.7

√ ac 2069
√ V1 Too poor
V2 9.0

ac 2170
√
Too poor

√ ac 2182
Fogged

ac 2186
V1
√ V2 Too poor

ac 2192
√ V1 Too poor
V2

√ ac 2193
Too poor

√ ac 2198
Too poor

ac 2209
√ V1 Too poor
√ V2 7.9 ?

ac 2217
√ V1 9.5
√ V2 8.9

ac 2240
√ V1 Too poor
√ V2 8.9

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[illegible]

√ ac 2254
Too poor

ac 2267
√ V1 9.8
√ V2 8.9

ac 2270
√ V1 9.4
√ V2 9.0

ac 2289
√ V1 9.4
√ V2 8.9

ac 2377
√ V1 Multiple image
V2

ac 2396
√ V1
√ V2 Too ~~poor~~ near edge

ac 2420
√ V1 Too near edge
V2.

ac 2438
V1 Multiple image
V2

Nos. 5 & 9.

√ ac 2326
Too poor

ac 2341
√ V1 10.3
√ V2 8.5

ac 2350
√ V1 Too poor
√ V2 9.0

ac 2353
√ V1 Too poor
√ V2 8.9

√ ac 2354
V1 10.0 ?
√ V2 8.8

√ ac 2355
V1 10.4 very poor
√ V2 8.9 very poor

√ ac 2356
√ V1 10.2
V2 9.1

March 27, 1907

Nos. 5 & 6

✓ ac 2299
Too poor

✓ ac 2302
Too poor

✓ ac 2305
✓ v1 9.7
v2 8.8

✓ ac 2316
✓ v1 10.2?
v2 7.7

I 30919 Sp.
✓ v1 10.2
✓ v2 8.9

Sp. too near edge to classify.

B 11379 Sp.
✓ $v_1$ 10.3
✓ $v_2$ 7.7

Sp. of $v_2$ = G. very good.

B 11316
✓ Plate not found
Lost in Peru.

B 10354 Sp.
✓ $v_1$ off plate
$v_2$ 7.6.
(Light even)

B 21770 Sp.
✓ $v_1$ ~~not seen~~ <9.7
✓ $v_2$ 8.8.

In sp. of $v_2$ the absorption is not quite so marked as in c.

✓ I 33294 Sp.
$v_1$ 9.0
✓ $v_2$ 8.5?

Near edge

✓ I 11472 Sp.
$v_1$ Too near edge
$v_2$ " "

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Nos. 5 & 6

B 646 B 6221
✓ Not covering

B 3168, B 3052
✓ Not covering

I 9138
✓ $v_1$ 8.8
✓ $v_2$ 7.8

✓ B 698 B 1456
✓ Not covering.

✓ B 1528, B 1623
✓ Not covering

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Nos. 5 to 9

ac 2783
✓ V1 10.3
✓ V2 8.5
✓

✓ ac 2804
V1
✓ V2 Too poor

ac 2822
✓ V1 10.0 ?
✓ V2 8.3

ac 2854
✓ V1 9.1
✓ V2 7.7

ac 2526
✓ V1 9.7
✓ V2 7.5

ac 2555
✓ V1 10.3
✓ V2 8.8

ac 2600
✓ V1 10.4
✓ V2 7.5

ac 2683
✓ V1 9.6
✓ V2 8.8

✓ ac 2706
✓ V1 Too poor
V2 8.3 ✓ ?

ac 2707
✓ V1 Too poor
✓ V2 " "

ac 2709
✓ V1 Too poor
✓ V2 8.8

ac 2770
✓ V1 10.3 ?
✓ V2 7.7

✓ ac 2440
Too poor

ac 2906
✓ V1 10.3 ?
✓ V2 7.6

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Nos. 5 to 9

ac 2985
✓ V1 9.4 ? Poor plate
✓ V2 8.9

ac 3056
✓ V1 Too poor
✓ V2 8.8

✓ ac 3057
✓ Too poor

✓ ac 3261
Too poor

ac 3475
✓ V1 10.6
✓ V2 8.3 ?

ac 3564
✓ V1 9.5
✓ V2 7.7

ac 3658
✓ V1 Too poor
✓ V2 9.1

ac 3667
✓ V1 10.4
✓ V2 8.7

ac 3683
✓ V1 10.5
✓ V2 7.7

ac 3713 Poor plate
✓ V1 8.9 ?
✓ V2 8.9

ac 3826
✓ V1 10.2
✓ V2 8.6

ac 3833
✓ V1 Too poor
✓ V2 7.6

ac 3884
✓ V1 Too poor
✓ V2 8.7

ac 3894
✓ V1 10.0 ?
✓ V2 8.9

ac 3901
✓ V1 10.1
✓ V2 8.9

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ac 3923
✓ v1 9.2
✓ v2 7.6

ac 3987
✓ v1 9.8
✓ v2 7.6

ac 4028
✓ v1 9.7 ?
✓ v2 8.9

ac 4037
✓ v1 9.2
✓ v2 8.7

ac 4075
✓ v1 not covering
v2

✓ ac 4109
v1 10.6
✓ v2 8.6

ac 4124
✓ v1 10.0
✓ v2 8.7
✓

ac 4156
✓ v1 9.5
✓ v2 8.8

ac 4748
✓ v1 9.9
✓ v2 8.8

ac 4805
✓ v1 9.1
✓ v2 7.7

ac 4906
✓ v1 9.7
✓ v2 9.0

✓ ac 4981 not covering

ac 5045
✓ v1 10.4
✓ v2 8.2

✓ ac 2364 Too poor

ac 5069
✓ v1 9.3
✓ v2 8.9

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ac 5107
✓ v1 nl
✓ v2 8.7

ac 5201
✓ v1 10.3
✓ v2 8.9

ac 5212
✓ v1 10.3
✓ v2 8.9

ac 5221
✓ v1 8.8
✓ v2 7.6

ac 5234
✓ v1 9.4
✓ v2 8.8

✓ ac 5244
✓ v1 10.4
v2 8.8

ac 5336
✓ v1 10.0
✓ v2 8.6

ac 5392
✓ v1 10.4
✓ v2 8.5

ac 5406
✓ v1 Too poor
✓ v2 9.0

ac 5474
✓ v1 10.3
✓ v2 8.8

ac 5483
✓ v1 10.4
✓ v2 8.9

✓ ac 5562 Am plate
✓ v1 10.0 ?
v2 8.9

ac 6022
✓ Too poor

ac 6087
✓ v1 10.0
✓ v2 8.3

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ac 6181
✓ v1 Too poor
✓ v2 7.8

ac 6231
✓ v1 9.0
✓ v2 7.6

ac 6254 Poor plate
✓ v1 Too poor
✓ v2 8.8

ac 6333
✓ v1 10.3
✓ v2 8.8

✓ ac 6364
v1 10.0
✓ v2 7.6

ac 6437
✓ v1 9.1 ?
✓ v2 8.6

ac 6454
✓ v1 9.1
✓ v2 8.8

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ac 6483
✓ v1 Too poor
✓ v2 7.5

am 1641
✓ v1 10.3
✓ v2 8.9

am 1876
✓ v1 10.4
✓ v2 9.0

am 1888
✓ v1 9.7
✓ v2 8.8

am 1992
✓ v1 9.4
✓ v2 8.9

am 2035
✓ v1 9.8
✓ v2 9.0

am 2185
✓ v1 9.7
✓ v2 9.0

am 2062
✓ v1 9.9
✓ v2 7.6

am 2201
✓ v1 9.8
✓ v2 8.7

am 2308
✓ v1 10.5
✓ v2 7.4

am 2534
✓ v1 10.4
✓ v2 8.9

am 2662
✓ v1 10.3
✓ v2 8.3

am 2670
✓ v1 9.7
✓ v2 8.9

am 2703
✓ v1 10.4
✓ v2 8.8

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am 2778
✓ V1 10.3
✓ V2 8.8

am 2826
✓ V1 10.4
✓ V2 8.9

✓ a~~m~~c 6533
✓ V1 10.4
V2 8.8

ac 6556
✓ V1 9.2
✓ V2 9.1

ac 6590
✓ V1 10.0?
✓ V2 8.9

ac 6680
✓ V1 Too poor
✓ V2 7.5

ac 6736
✓ V1 10.4
✓ V2 8.3

ac 6771
✓ V1 9.2
✓ V2 9.0

ac 6959
✓ V1 9.1
✓ V2 8.8

ac 7058
✓ V1 9.6
✓ V2 9.1

ac 7080
✓ V1 Too poor
✓ V2 8.4

✓ ac 7486 }
✓ ac 7570 } Too poor

ac 7606
✓ V1 10.4
✓ V2 7.6

ac 7620
✓ V1 10.3
✓ V2 8.7

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ac 7680
✓ V1 9.5
✓ V2 7.7

ac 7695
✓ V1 9.7
✓ V2 8.9

ac 7715
✓ V1 10.1
✓ V2 8.9

ac 7767
✓ V1 10.1
✓ V2 8.5

ac 7794
✓ V1 10.6
✓ V2 8.6

ac 7823
✓ V1 10.1
✓ V2 7.7

ac 7950
✓ V1 Too poor
✓ V2 7.9

am 53
✓ V1 10.4
✓ V2 7.7

am 102
✓ V1 10.5
✓ V2 8.6

am 121
✓ V1 10.2
✓ V2 9.0

am 199
✓ V1 10.3
✓ V2 8.7

am 247
✓ V1 Too poor 10.2?
✓ V2 7.5

✓ am 440
Not Coming

am 861
✓ V1 10.4
✓ V2 8.5

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am 510
" 547
" 563
" 599
" 657
not covering.

am 870
✓ v1 10.4
✓ v2 8.6

am 881
✓ v1 10.2
✓ v2 7.6

am 989
✓ v1 10.5
✓ v2 8.9

am 1000
✓ v1 9.6
✓ v2 8.6

am 1088
✓ v1 10.3
✓ v2 8.9

am 1207
✓ v1 8.8
✓ v2 9.0

am 1385
✓ v1 9.7
✓ v2 8.9

am 1493
✓ v1 10.3
✓ v2 7.6

am 1623
✓ v1 9.9
✓ v2 8.9

am 2857
✓ v1 10.0
✓ v2 8.7

am 3091
✓ v1 10.3
✓ v2 7.7

am 3108
✓ v1 10.4 ?
✓ v2 7.9

am 3149
✓ v1 8.8
✓ v2 8.8

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am 1215
✓ v1 10.2
✓ v2 8.9

am 1312
✓ v1 9.4
✓ v2 8.9

am 1344
✓ v1 10.2
v2 8.6
✓

am 3456
✓ v1 10.3
✓ v2 7.7

am 3485
✓ v1 10.4
✓ v2 7.7

am 3525
✓ v1 10.3
✓ v2 7.8

am 3577
✓ v1 10.3
✓ v2 8.8

am 3632
✓ v1 10.3
✓ v2 8.9

am 3648
✓ v1 10.2
✓ v2 7.7

✓ am 3712
v1 8.9
✓ v2 8.8

am 3751
✓ v1 8.8
✓ v2 8.8

am 3753
✓ v1 8.9
✓ v2 8.4 ?

am 3763
✓ v1 10.3
✓ v2 9.0

am 3776
✓ v1 10.3
✓ v2 8.9

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am 3802
✓ v1 9.~~4~~5
✓ v2 8.7

am 3839 Centre 1857+8.8
✓ v1 8.9
✓ v2 8.5

am 3840
✓ v1 9.4
✓ v2 8.8

am 3897
✓ v1 9.1
✓ v2 9.0

am 3952
✓ v1 10.3
✓ v2 8.9

am 4165
✓ v1 10.3
✓ v2 7.7

am 4256
✓ v1 10.5
✓ v2 8.9

am 4295
✓ v1 10.4
✓ v2 7.6

am 4332
✓ v1 9.7
✓ v2 8.7

am 4344
✓ v1 9.7
✓ v2 8.5

am 4355
✓ v1 10.4
✓ v2 8.2

am 4414
✓ v1 10.3
✓ v2 8.9

am 4428
✓ v1 8.9
✓ v2 ~~8.~~ 7.6

am 4432
✓ v1 ~~8.9~~ 8.9
✓ v2 7.7

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am 4438
✓ v1 9.0
✓ v2 7.9

am 4456
✓ v1 10.3
✓ v2 7.7

am 4479
✓ v1 8.9
✓ v2 7.9

am 4515
v1 Too poor
✓ v2

am 4528
✓ v1 9.5
✓ v2 8.3

am 4606
✓ v1 10.2
✓ v2 8.8

am 1424
✓ v1 10.5
✓ v2 8.5

ac 3812
✓ v1 9.5
✓ v2 off plate

ac 3725
✓ v1 8.9
✓ v2 off plate

ac 3651
✓ v1 10.3 ?
✓ v2 off plate

ac 3599
✓ v1 Too near edge
v2

✓ ac 3503 Too poor

am 3882
✓ v1 8.7
✓ v2 8.8

ac 3889 Too poor
v1
v2

ac 7954
✓ v1 9.4
✓ v2 off plate

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ac 7855
√ V1 8.8
√ V2 Too near edge

ac 7805
√ V1 9.0
√ V2 off plate

ac 7719
√ V1 Too near edge
V2

√ ac 7662
V1 Too near edge
√ V2

√ ac 7048 Too near edge

√ ac 6863
V1 9.1
√ V2 7.5

ac 6758
V1 10.3
√ V2 off plate

ac 6713
√ V1 10.2
√ V2 off plate

ac 6537
V1 10.4
√ V2 off plate

ac 6486
√ V1 not seen ~~[illegible]~~ <10.5
V2 7.7

√ ac 6476 Too poor

√ ac 6246 Too poor

√ ac 6156 Too poor

√ am 1554
√ V1 10.0
V2 8.3

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√ am 1553
V1 9.9
√ V2 7.7

am 1542
√ V1 9.2
√ V2 8.9

am 1251
√ V1 10.3
√ V2 8.8

am 1287
√ V1 10.4
√ V2 off plate

am 1237
√ V1 8.9
√ V2 8.8

am 1270
√ V1 10.3
√ V2 9.0

am 473
√ V1 10.5
√ V2 7.7

am 556
√ V1 9.8
√ V2 8.3

am 403
√ V1 not seen <10.3
√ V2 8.9

am ~~402~~ 153
√ V1 10.4
√ V2 8.9

am 28
√ V1 9.7
√ V2 9.0

am 10
√ V1 9.0
√ V2 8.9

√ am 3726
√ V1 10.4
V2 8.6

am 3688
√ V1 10.4
√ V2 7.7

March 28, 1907

am 3651
✓ v1 9.9
✓ v2 7.7

am 3598
✓ v1 9.1
✓ v2 Too near edge

am 3505
✓ v1 10.2
✓ v2 7.7? b off plate

am 3464
✓ v1 10.3
✓ v2 8.9

am 3449
✓ v1 10.4
✓ v2 9.0

✓ am 3422
v1 9.1
✓ v2 7.7

am 2995
✓ v1 10.3
✓ v2 8.5

am 2110
✓ v1 10.5
✓ v2 8.9

✓ am 2915
v1 9.4
✓ v2 8.8

am 2855
✓ v1 9.9
✓ v2 8.7

am 2714
✓ v1 10.4
✓ v2 8.8

am 2279
✓ v1 10.1
✓ v2 off plate

am 2260
✓ v1 10.5
✓ v2 8.9

am 2245
✓ v1 10.3
✓ v2 8.2

March 28 1907

am 961
v1 9.7
v2 8.9

~~ac 6407~~
~~v1~~
~~v2~~

ac 1584
✓ Too poor

ac 1621
✓ Too poor

✓ ac 1624
Too poor

ac 1632
✓ Too poor

ac 1675
✓ v1 9.7
v2 off plate

ac 5328
✓ v1 not coming
v2

ac 4949
v1 8.8
✓ v2 off plate

ac 6393
✓ v1 9.7
✓ v2 off plate

ac 6421
v1 9.4
✓ v2 off plate

ac 6323
v1 10.5
✓ v2 off plate

ac 1546
v1 9.7
✓ v2 8.9

ac 1518
✓ Too near edge

ac 3899
v1 10.3? Near edge
✓ v2 off plate

March 28, 1907

ac 5058
✓ v1 9.8$^{4}$
✓ v2 7.7? + off plate

am 1483
✓ v1 9.7
✓ v2 8.0

am 3835
✓ v1 10.4
✓ v2 7.8

am 953
v1 9.5
v2 8.9

ac 362
v1 9.5
✓ v2 8.4
✓
5 images, no variation

✓ ac 1518
not occurring

ac 3889
✓ $v_1$ <9.7 too near edge
$v_2$ not on plate

am 3875
mult. image
✓ $v_1$ 10.4 no variation
✓ $v_2$ 8.8 "

am 4411
multiple image
✓ $v_1$ 10.5 no var.
✓ $v_2$ 8.9 " "

am 3755
mult. image
✓ v1 9.7, no variation
✓ $v_2$ 7.6 " "

✓ am 973
v1 10.2
✓ v2 8.8

am 957
✓ v1 9.4
✓ v2 7.7

March 28, 1907

ac 2934
✓ $v_1$ too poor
✓ $v_2$ 9.0

ac 2962
✓ $v_1$ not seen
✓ $v_2$ 7.7

ac 2874
$v_1$ not seen
✓ $v_2$ 8.8?
✓ very poor

ac 2729
✗ $v_1$ not seen
$v_2$ 7.8
mult. image
no variation

ac 2607
mult image
✓ $v_1$ 8.9 no var.
✓ $v_2$ 8.7 " "

ac 2608
✓ $v_1$ 9.0 no var.
✓ $v_2$ 8.8 " "
mult. image

ac 2535
v1 10.2? too poor
$v_2$ 8.6
mult. image
no variation

ac 2441
mult. image
v1 8.9 no. var.
✓ $v_2$ 8.8 " "
✓ very poor

✓ ac 2464
too poor

✓ ac 2465
too poor

ac 2478
✓ mult. image
$v_1$ too poor
✓ $v_2$ 8.9?

March 28, 1907.

ac 2479
√ $v_1$ 9.1
√ $v_2$ 9.0
mult. image.

ac 2831
√ Too poor.

ac 2830
√ Too poor

ac 2774
√ $v_1$ <9.5
$v_2$ 7.8
√ mult. image

ac 2775
√ $v_1$ <9.5
$v_2$ 8.3

√ ac 2776
Too poor

B 22859
√ $v_1$ 8.9
√ $v_2$ 8.8

March 29, 1907

ac 2788
√ $v_1$ 9.7
√ $v_2$ off plate

am 3739
√ $v_1$ 9.2
√ $v_2$ 9.0

am 4150
√ $v_1$ 9.5
√ $v_2$ 8.8

ac 7476
√ $v_1$ 9.8
√ $v_2$ off plate

am 4190
√ $v_1$ wrong region
$v_2$

ac 7550
√ $v_1$ 8.8
√ $v_2$ 8.6

am 4196
√ $v_1$ Too poor
√ $v_2$

am 4244
√ $v_1$ 9.7
√ $v_2$ 8.7

am 4271
√ $v_1$ 10.0
√ $v_2$ 7.4

ac 7596
√ $v_1$ 10.3
√ $v_2$ off plate

am 4313
√ $v_1$ 10.2
√ $v_2$ ~~7.1 8~~ 7.8

am 4354
√ $v_1$ 10.5
√ $v_2$ 8.3 ? & off plate

am 4393
√ $v_1$ 10.3
√ $v_2$ 7.8

ac 1781
√ $v_1$ 9.9 ? very poor
√ $v_2$ off plate

March 29. 1907

ac 1749
✓ Too poor

ac 1682
✓ Too poor

ac 2815
✓ v1 10.3
✓ v2 off plate

ac 2771
✓ v1 10.5 ?
v2 off plate

ac 2673
✓ v1 9.7
v2 off plate

ac 2625
✓ v1 Too poor
v2

ac 2580
✓ not coming

ac 2553
✓ v1 10.3
✓ v2 8.8

March 29. 1907

ac 2485
✓ Too poor

ac 1859
✓ v1 9.5
v2 8.5? b off plate

ac 1821
v1 10.3
✓ v2 8.9

am 1021
✓ v1 8.8
✓ v2 8.3

ac 360
✓ v1 10.0?
✓ v2 8.9

ac 379
✓ v1 10.3
v2 7.6

ac 3977
✓ v1 10.2
✓ v2 off plate

ac 4864
✓ v1 10.0
✓ v2 off plate

✓ ac 5098
Too poor

✓ ac 612x
Too poor

ac 4954
✓ v1 ~~8.9~~ 9.0 ?
✓ v2 8.9

✓ am 576
v1 10.0
✓ v2 8.2

am 622
✓ v1 10.5
✓ v2 8.9

am 646
✓ v1 9.7
✓ v2 8.9

am 800
✓ v1 10.0
✓ v2 8.9

March 29. 1907

AM 818
✓ V1 9.6
✓ V2 8.0

AM 897
✓ V1 10.3
✓ V2 8.0

ac 5199
✓ V1 10.5?
✓ V2 off plate

ac 5561
✓ V1 9.7? Too poor
✓ V2 8.9

ac 1571
✓ V1 9.3
✓ V2 8.3

ac 1572
✓ V1 8.8
✓ V2 7.8

✓ ac 1517 } Too near edge
✓ ac 1511 }

ac 1461
✓ V1 9.9
✓ V2 off plate

ac 1390
✓ Too poor

ac 1019
✓ V1 9.3
✓ V2 Too near edge

ac 929
✓ V1 <9.5
✓ V2 Too near edge

ac 855
✓ V1 10.2
✓ V2 off plate

✓ ac 910
Too poor

ac 843
✓ V1 10.4
✓ V2 off plate

✓ ac 780
V Too poor

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✓ ac 361
Too poor

ac 377
✓ V1 10.3
✓ V2 8.0

ac 471
V1 Too poor
✓ V2

ac 858
✓ V1 8.9
✓ V2 8.9

ac 868
✓ V1 8.9
✓ V2 8.9

✓ ac 869
Too poor

✓ ac 936
Too poor

✓ ac 948
✓ V1 10.5
V2 8.6

ac 963
✓ V1 Too poor
V2 8.9.

ac 1462
✓ V1 10.0
✓ V2 7.7

ac 1475
V1 Too poor
✓ V2 8.8

ac 1501
✓ V1 10.3?
✓ V2 9.0

ac 1527
✓ V1 9.1
✓ V2 7.8

ac 1542
✓ V1 Not coming
V2

ac 1618
✓ V1
V2

March 29, 1907

Nos. 5 & 9

ac 1655
✓ v1 <9.6
✓ v2 8.8

ac 1699
✓ v1
v2 Too poor

ac 1722
✓ v1 9.5
✓ v2 8.9

ac 1780
✓ v1 9.7
✓ v2 8.7

ac 1828
✓ not identified

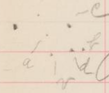
ac 1840
✓ v1 9.5
✓ v2 8.9

Am 2573
$v_1$ 8.9
$v_2$ 8.3

---

March 30, 1907

Examination of AC plates for (1h 25 +45 45)
variables No. 21, A. J. C.
found on ac 7028. See p. 59.



ac 6527
var. not seen <10

a = +45° 374 9.5
b = +45° 370 9.2
c = not in Dm.
d = +45° 371 9.2

ac 6621
var. not seen <10

Order of photog. mag. on I 19124
d, c, b, a.

ac 6682 n. s. <9
ac 6697 " " <10
ac 6730 barest trace est. 11m
ac 6753 v = a 3 v 10.2 " " " "
ac 6845 a 1 v 10.0
ac 6857 a 1 v 10.0
ac 6904 ~~a~~ v = a 9.9
Nov. 8, 1905 ac 6952 b 2 v, 1 a 9.6
ac 7060 v = c 9.2
ac 7176 b 2, 2 a 9.7
Dec. 5, 1905 ac 7083 d 4, 1 c 9.1
Sept. 1, 1906 ac 7774 Invis. <9.5
ac 8000 v = b 9.4
ac 7922 Too poor
ac 8022 c 1, 2 b 9.3
8030 c 1, 3 b 9.3
Nov. 25, 1906 8056 c 1, 2 b 9.3
8118 b 1, 3 a 9.6
8255 not seen <11

March 30, 1907

Nov. $1^{h}25$ + 45 45 (1855)

Cont. of preceding

| | | | |
|---|---|---|---|
| | Ac2929 | , not seen | < 10. |
| | Ac4228 | " " | < 10.5 |
| | Ac4259 | " " | " |
| Sept. 14, 1897 | I 18830 | 9.$\overset{8}{5}$ | |
| Oct 1 " | I 19124 | 9.4 | |
| Nov. 7, 1899 | I 23989 | 11.5 | |
| Aug. 31, 1896 | I 15831 | 9.8 | |
| Nov. 21, 1905 | Ac7028 | 9.4 | |
| Jan. 17, 1906 | Ac7176 | 9.6 | |
| Mch 1, 1906 | Ac7335 | barely seen | 10.4? |
| Dec. 19, 1906 | Ac8118 | 9.5 | |
| Feb. 15, 1907 | Ac8255 | not seen | < 10.5 |
| Sept. 28, 1898 | Ac48 | not seen. | Too poor. |
| Nov 9, 1899 | Ac511 | " " | < 10 |
| Dec 30 " | Ac638 | " " | < 10 |
| Jan. 30, 1900 | Ac698 | " " | < 10 |
| Feb. 1, " | Ac703 | " " | < 10 |
| Aug. 1, 1900 | Ac950 | 9.9 | |
| Nov. 3, 1898 | I 21644 | 10.1 | |
| Dec. 1, 1898 | I 21850 | 10.4 | |
| Nov. 20, 1892 | I 7660 n.s | < 10.5 ✓ | |
| Jan. 22, 1893 | I 7944 | 9.4 ✓ | |
| Aug 15, " | I 9261 | n.s | < 10. |
| " 22 " | I 9290 | " " | < 10. |

April 4, 1907

Cont. of estimates of Var. No. 2.

| | | | |
|---|---|---|---|
| Oct. 7, 1893 | I 9684 | 10.5 | |
| Sept. 9, 1893 | I 9435 | n.s < 10.5 | |
| Nov. 18, 1905 | I 33653 Sp. | 9.4 | No lines seen |
| | I 33654 Sp. | | no lines seen |
| Jan. 4, 1905 | Ac5795 | 9.6 | |
| Aug. 31, 1904 | Ac5215 | n.s < 10 | |
| Jan. 17, 1899 | Ac157 | " " < 10.3 | |
| Nov. 28, 1904 | Ac5626 | 10.2 | |
| Dec. 19, 1903 | Ac4406 | 10.3 | |

April 1, 1907

Cont. of estimates of +1°3877 and +1°3899

ac 2521
✓ V1 9.2
✓ V2 8.8

ac 2568
✓ V1 9.4
✓ V2 7.7

ac 2609
✓ V1 Too poor
V2

ac 2645
✓ Too poor

✓ ac 2612 Poor plate
V1 9.4?
✓ V2 8.8?

ac 2655
✓ V1 9.9
✓ V2 7.6

ac 2691
✓ V1 9.7
✓ V2 7.8

ac 2715
✓ V1 9.6
✓ V2 8.8

ac 2478
✓ V1 10.2
✓ V2 8.4

ac 2837
✓ V1 ~~8.8~~ 9.8
✓ V2 8.9

ac 2847
✓ V1 8.8
✓ V2 8.7

ac 2910
✓ V1 not seen < 9.7
✓ V2 8.8

ac 2961
✓ V1 10.3
✓ V2 7.7

April 1, 1907

ac 3601
✓ V1 not seen < 9.8
✓ V2 8.8

ac 3702
✓ V1 8.8
✓ V2 8.8

ac 3836
✓ V1 10.3
✓ V2 7.8

ac 3851
✓ V1 10.3
✓ V2 8.9

ac 3935
✓ V1 9.6
✓ V2 8.0

ac 4955
✓ V1 9.1
✓ V2 8.8

ac 5042
✓ V1 10.3
✓ V2 8.7

ac 5068
✓ V1 9.4
✓ V2 8.9

ac 5180
✓ V1 10.2
✓ V2 8.7

ac 5211
✓ V1 10.4
✓ V2 8.8

ac 5335
✓ V1 9.8
✓ V2 8.3

ac 6358
✓ Too poor

ac 1618
✓ V1 9.0
✓ V2 9.1

am 4244
✓ V1
✓ V2

April 1, 1907

am 2989
✓ v1 10.4
✓ v2 8.9

am 3081
✓ v1 10.2
✓ v2 8.8

am 3099
✓ v1 10.4 ?
✓ v2 7.6

am 3128
✓ v1 9.5
✓ v2 8.8

am 3443
✓ v1 10.2
✓ v2 8.9

am 3515
✓ v1 10.3
✓ v2 7.7

am 3587
✓ v1 10.2
✓ v2 8.8

am 3631
✓ v1 10.1
✓ v2 8.9

am 3647
✓ v1 9.9
✓ v2 7.9

am 3711
✓ v1 8.9
✓ v2 9.0

am 3742
" 3743
✓ v1 9.3
✓ v2 9.0

am 3764
✓ v1 10.4
✓ v2 8.9

am 3891
✓ v1 9.2
✓ v2 9.1

am 3953
✓ v1 10.4
✓ v2 9.0

April 1, 1907

am 4176
✓ v1 10.3
✓ v2 8.9

am 4260 2 Exposures
✓ v1 10.4 1st image 2nd image 10.3
✓ v2 ~~10.3~~ 1st image 8.8 2nd image 8.8

am 4335
✓ v1 8.8
✓ v2 8.9

am 4368
✓ v1 9.9
✓ v2 8.9

am 4473
✓ v1 8.8
✓ v2 7.7

am 4506
✓ v1 Too poor
✓ v2

am 4514
✓ v1 10.2
✓ v2 7.9

✓ am 4555
Too poor

am 4601
✓ v1 9.3 ✓ v2 7.7

am 4648
✓ v1 9.1
✓ v2 8.3

am 46
✓ v1
v2

am 87
✓ v1 10.2
✓ v2 8.8

am 104
✓ v1 10.5
✓ v2 8.9

am 204
✓ v1 10.4
✓ v2 7.5

April 1, 1907

am 239
✓ v1 10.2
✓ v2 7.4

am 433
✓ Too poor

am 511
✓ v1 not seen <9.8
✓ v2 9.0

am 539
✓ v1 9.3
✓ v2 8.9

am 566
✓ v1 10.4
✓ v2 8.0

am 835
✓ v1 10.3
✓ v2 8.8

am 850 Leo
✓ v1 9.2
✓ v2 7.8

am 868
✓ v1 10.5
✓ v2 8.5

am 959
✓ v1 9.7
✓ v2 7.8

am 1010
✓ v1 9.8
✓ v2 8.8

am 1191
✓ v1 not seen <10.3
✓ v2 7.6

am 1203
✓ v1 9.2
✓ v2 9.1

am 1297
✓ v1 10.2
✓ v2 7.7

am 4296
✓ v1 10.4
✓ v2 7.7

April 1, 1907

ac 6431
✓ v1 9.7
✓ v2 8.5

ac 6459
✓ v1 not seen <9.4
✓ v2 8.8?

ac 6493
✓ v1 10.0
✓ v2 8.7

ac 6532
✓ v1 10.3
✓ v2 8.5

ac 6632
✓ v1 10.4
✓ v2 8.3

ac 6699
✓ v1 9.6
✓ v2 8.8

ac 6835
✓ v1 10.5
✓ v2 8.9

ac 7491
✓ Too poor

ac 7681
✓ v1 9.5
✓ v2 8.4

ac 7726
✓ v1 10.3
✓ v2 8.8

ac 7738
✓ v1 10.2
✓ v2 8.3

ac 7801
✓ v1 10.3
✓ v2 8.8

ac 7905
✓ v1 10.4
✓ v2 8.8

am 116
✓ Too poor

am 75
✓ v1 10.3
✓ v2 8.6

April 1, 1907.

Am 68
✓ $v_1$ not seen < 9.4
✓ $v_2$ 7.9

Am 4244
$v^1$ 1st 9.7
2nd 9.7
$v^2$ 1st 8.5
2nd 8.5

Am 46
Two exposures
✓ $v_1$ 1st 10.4
2nd looks brighter
but another star is
superposed.
✓ $v_2$ 1st 8.8
2nd 8.8

Am 1319
Mult. image
✓ $v_1$ 9.8 no var.
✓ $v_2$ 8.9 " "

Am 921
multiple images
✓ $v_1$ 9.6 no var
✓ $v_2$ 8.8 " "

Am 911
Mult. image
✓ $v_1$ 10.3 no var
✓ $v_2$ 8.8 " "

Am 920
mult. image
✓ $v_1$ 9.6
✓ $v_2$ 8.8

Am 916
✓ $v_1$ 9.6
✓ $v_2$ 9.0

AC 1536
✓ $v_1$ 9.6
✓ $v_2$ 8.8
Sequence marked

AC 6544
✓ $v_1$ 10.3
✓ $v_2$ not on plate

Am 2137
✓ $v_1$ 10.4
✓ $v_2$ 8.4

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Am 2119
✓ $v_1$ 10.4
✓ $v_2$ 8.9

Am 3921
✓ $v_1$ 10.3
✓ $v_2$ 8.8? too near edge.

AC 3787
✓ $v_1$ 10.2
✓ $v_2$ 9.1

AC 7730
✓ $v_1$ 10.4
✓ $v_2$ 7.6

AC 7727
✓ $v_1$ 10.3?
✓ $v_2$ 8.8

Am 685
✓ $v_1$ 9.2
✓ $v_2$ 8.8

AC 4065
✓ $v_1$ 10.1
✓ $v_2$ 8.8

I 4137
✓ $v_1$ 10.0
✓ $v_2$ 8.9

Am 4463
✓ $v_1$ 9.4
✓ $v_2$ 7.6

B 30043
✓ $v_1$ 10.3
✓ $v_2$ 8.3 too dense

~~Am 2796~~

AC 1325
✓ Can not identify.

Am 2796
✓ $v_1$ 9.3
✓ $v_2$ 8.5

Am 2660
✓ $v_1$ 9.5
✓ $v_2$ 8.3

April 1, 1907

I 25511 Sp.
✓ $v_1$ 9.8
✓ $v_2$ 7.7
Sp. of $v_1$ shows
no absorption.

I 25534 Sp.
✓ $v_1$ 9.7
✓ $v_2$ 8.9
Sp. of $v_2$ is
nearly like that
of e.

Am 2745
mult.
✓ $v_1$ 9.4 no var.
✓ $v_2$ 7.7 " "

Am 2143 (mult.)
✓ $v_1$ too confused with other stars
✓ $v_2$ 7.7 no var.

Am 4410 mult.
✓ $v_1$ 10.5
✓ $v_2$ 8.9

Am 3677 (mult.)
✓ $v_1$ 9.9 no var
✓ $v_2$ 8.8 " "

Am 1448
✓ $v_1$ 9.0
✓ $v_2$ 8.8

Am 1918
✓ $v_1$ 10.6
✓ $v_2$ 9.1

Am 3910
✓ $v_1$ 9.4
✓ $v_2$ 8.8

Am 3739
✓ $v_1$ 9.5
✓ $v_2$ 8.9

Ac 5343
✓ $v_1$ 10.3
✓ $v_2$ off plate

Am 4655
✓ $v_1$ 9.6
✓ $v_2$ 8.9

April 1, 1907

Ac 7668 poor place
✓ $v_1$ not seen < 9.1
✓ $v_2$ 8.9

Ac 6576
✓ not covering

Am 2958
✓ $v_1$ 8.8
✓ $v_2$ 8.8

Am 888
✓ $v_1$ 9.8
✓ $v_2$ 8.3

Am 4535

✓ $v_1$ 8.8
✓ $v_2$ 8.9

Ac 3693
✓ $v_1$ 10.3
✓ $v_2$ 8.4

Am 3811
✓ $v_1$ 9.9
✓ $v_2$ 8.8

Am 2767
✓ $v_1$ 10.3
✓ $v_2$ 8.9

Am 2619
✓ $v_1$ 10.2
✓ $v_2$ 8.0

Am 3561
✓ $v_1$ 9.8
✓ $v_2$ 7.7

Am 1436
✓ $v_1$ 8.9
✓ $v_2$ 8.9

Ac 6565
✓ $v_1$ 10.3
✓ $v_2$ 8.3

Am 2335
✓ $v_1$ 9.6
✓ $v_2$ 9.0

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am 2725
✓ $v_1$ 10.3
✓ $v_2$ 8.9

am 4545
$v_1$ 10.5
$v_2$ 7.7

am 1051
✓ $v_1$ 9.6
✓ $v_2$ 8.9

ac 5227
✓ $v_1$ 9.5
✓ $v_2$ 8.5? too near edge

am 4371
✓ $v_1$ 9.7
✓ $v_2$ 7.6

ac 4923
✓ $v_1$ 10.3
✓ $v_2$ 8.8? too near edge

am 4624
✓ $v_1$ 10.3
✓ $v_2$ 8.8

ac 1730
✓ $v_1$ 9.8
✓ $v_2$ 9.2 near edge

ac 4986
✓ $v_1$ 10.2
✓ $v_2$ 8.9

am 1522
2 images of each object
$v_1$ southern ~~1st~~, 8.8, northern 10.7
$v_2$ " 8.8 " 8.8

am 3905
✓ $v_1$ 9.5
✓ $v_2$ 8.9

am 3912
✓ $v_1$ 10.3
✓ $v_2$ 8.3 dense

J 25701
✓ $v_1$ 9.8
✓ $v_2$ 8.9

am 919
✓ mult.
Images too much run together

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April 1, 1907.

ac 952
mult.
✓ $v_1$ too faint <9.4
✓ $v_2$ 9.1 no var.

April 9, 1907

Estimates of +1°3897 & +1°3899

am 1874
✓ $v_1$ 10.4
✓ $v_2$ 8.9

am 875
✓ $v_1$ 10.4
✓ $v_2$ 7.5

am 1887
✓ $v_1$ 9.7
✓ $v_2$ 8.8

am 2142
✓ $v_1$ 9.7
✓ $v_2$ 7.9

am 1523
✓ $v_1$ 9.1
$v_2$ 9.2

ae 6643
✓ $v_1$ 9.2
✓ $v_2$ 8.8

ac 5226
✓ $v_1$ 8.9
✓ $v_2$ 7.8

ac 7992
✓ $v_1$ 9.8
✓ $v_2$ 8.8

am 4487
✓ $v_1$ 9.2
✓ $v_2$ 8.9

am 4671
✓ $v_1$ 9.9
✓ $v_2$ 8.8

am 1993
✓ $v_1$ 9.5
✓ $v_2$ 9.3

am 1384
✓ $v_1$ 9.5
✓ $v_2$ 9.2

am 1594
✓ $v_1$ 9.4
✓ $v_2$ 7.5

---

April 9, 1907

am 1631
✓ $v_1$ 10.2
✓ $v_2$ 9.2

am 2072
✓ $v_1$ 10.5
✓ $v_2$ 8.8

am 2052
✓ $v_1$ 9.1
✓ $v_2$ 8.8

am 2200
✓ $v_1$ 9.8
✓ $v_2$ 8.7

am 2184
✓ $v_1$ 9.6
✓ $v_2$ 9.0

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