KG
11366
028

1910phae.proj:1029N

Foreign
Observing Book 1
J. C. M.

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KG 11366.028

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HG 11366.028

July 27, 1910

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Meas. Var. Star (P) - 72°75 : for Mr. Bailey on account of discordances in Photometric mags.

AM 3940	AM 972	AM 3868	The following plates are normal
b 2 v	b 2 v	b 2 v	
v 1 c	v 2 c	v 2 c	
AM 1739	AM 1096	AM 3987	AM 2340
b 2 v	b 2 v	b 2 v	AM 3154
v 1 c	v 1 c	v 2 c	AM 3242
			AM 3323
AM 2181	AM 1117	AM 3991	AM 3652
b 2 v	b 2 v	b 2 v	AM 3766
v 1 c	v 2 c	v 2 c	AM 4496
			AM 4519
AM 2195	AM 1650	AM 4074	AM 5102
b 2 v	b 2 v	b 2 v	AM 5197
v 2 c	v 1 c	v 2 c	AM 5230
			AM 82
AM 2238	AM 85	AM 219	AM 3200
b 2 v	b 2 v	b 2 v	AM 3024
v 1 c	v 2 c	v 2 c	AM 4297
			AM 4020
AM 329	AM 112	AM 257	AM 2898
b 2 v	b 2 v	b 2 v	AM 2781
v 2 c	v 2 c	v 2 c	AM 2237
			AM 2207
AM 698	AM 3798		AM 4430
b 2 v	b 2 v		
v 2 c	v 1 c		

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1910phae..proj..1023M

July 27, 1910

~~CPD~~ -72°75 cont.

am 4466	am 1744
am 4522	am 1656
am 4565	am 1399
am 4686	am 1356
am 4881	am 1313
am 5043	am 1300
am 5150	am 1103
am 5255	am 4236
am 5711	am 1091
am 5721	am 3939
am 6290	am 1005
am 6371	am 964
am 6450	am 889
am 6637	am 873
am 6756	am 3860
am 6316	am 836
am 6640	am 543
am 6685	am 3993
am 6702	am 520
am 6743	

Magn. of Var. Mean 8.95

Var	CPD-72°	75	0	56	56.5	-72	12.8	9.1
a	CPD-72°	76	0	57	20.0	-72	13.2	8.2
b	CPD-71°	34	0	53	32.0	-71	32.5	8.6
c	CPD-71°	32	0	49	23.0	-71	29.0	9.3
d	CPD-71°	39	0	2	32.5	-71	58.4	9.2

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July 19, 1912.

HR 20 34.1 +20 51 4.78 DM 4658

AI Plates Examined for variability. ~~D~~

Marked on AT #10960

AI 10196	7208	3215
8447	7084	3162
8352	6973	3016
8347	6895	2852
8292	6857	2701
8272	6823	2666
8263	6355	2646
8260	6277	318
8232	6243	2448
8205	6136	1814
8083	7052	1718
6078	5549	1573
7828	5505	1567
7393	5462	985
7318	4389	448
7282	4294	560
		528

No variation in the above

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1910phae.proj.1029M

July 22, 1912

DM +2° 487 Phot. Magn. 8.37.
Examined following A C Plates for variability.
Found no variation.
Marked on I 10097

Ab 55	Ab 2841	Ab 5556	Ab 8270
62	2884	5609	8308
126	2949	5686	8335
150	2971	5695	8810
178	3111	5775	8852
179	3171	~~5854~~	8985
221	3217	5957	9137
~~424~~	3240	5981	9213
430	3311	6767	9231
688	3359	6791	9275
1003	3991	6870	9302
1093	3999	6873	9678
1144	4087	6876	9823
1177	4120	6953	9901
1251	4196	6954	9982
1331	4427	7090	10056
1692	4437	7182	10080
1785	4457	7228	10114
1885	4505	7279	10142
1951	4581	7397	10224
2026	4651	7836	10274
2086	4697	7879	10780
2125	5240	7976	10840
2172	5349	8045	10866
2250	5404	8201	10913
2378	5451	8221	10959

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July 22, 1912

DM +2°487 Variable ? cont.

ab	11128
	11145
	11385
	11936
	11965
	11984
	12020
	12033
	12070
	12183
	12207
	12299
	12585
	12639
	12677
	~~12710~~
	12801

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1910phae.proj.1029M

July 22, 1912

DM +19° 2088 Phot. Magn. 992
Following Ale Plates examined for variation.
Marked on I 17717
No variation.

Ale	
146	8134
201	8234
591	7041
625	9238
1264	9389
2382	10290
2435	10952
3245	11176
3307	11389
3389	11395
3433	11446
4142	11451
4241	11487
5816	11552
6134	12063
6145	12168
6248	12791
7208	
7281	12796
7310	12891
	12901

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1910phae.proj.1029M

Entered on card

July 23, 1912.

D'Estein's Star Marked by Miss Cannon on I 28376

Approx. 1855. 2 0.0 +56 31

~~Seen on I 16391, I 23567, I 28376.~~

Seen on I 16391, Oct. 30, 1896

" " I 23567, Sept. 17, 1899

" " I 28376, Jan. 28, 1902

Not seen on following I Plates.

60	Oct. 17, 1889	12187	Jan. 2, 1895	18720	Sept. 8, 1897
1901	Sept. 29, 1890	13101	July 23, "	19459	Nov. 4, "
2293	Nov. 1 "	15258	June 3, 1896	19509	" 7, "
2745	Jan 8, 1891	15351	" 22, "	19670	" 30, "
2853	Jan 16, "	15893	Sept. 4, "	19859	Dec. 30, "
2856	" 16, "	15969	" 20, "	20129	Feb. 3 1898
3228	March 2, "	16206	Oct. 19, "	24111	Nov. 20 1899
3270	March 11, "	16629	Dec. 1, "	29650	Dec. 8, 1902
5307	Jan. 1, 1892	16525	Nov. 14, "		
5362	" 8, "	16735	" 11, "		
6854	Sept. 3, "	16764	" 14, "	I 2101,	Oct. 30, 1890
7773	Dec. 29, "	17035	Jan. 11, 1897	2560,	Dec. 22, 1890
7823	Jan 3, 1893	17190	" 25, "	10844,	Mar. 19, 1894
10202	Dec. 18 "	17279	Feb. 9, "	11608,	Oct. 10, "
10357	Jan. 1, 1894	17302	" 10, "	15189,	May 27, 1896
10352	" 1, "	17401	" 24, "	15346,	June 22, "
10442	" 19, "	17553	Mar. 3, "	15894	Sept. 4, "
10759	Mar. 7, "	17823	April 12, "	16226	Oct. 22, "
10932	" 27, "	18313	July 5, "	17866	Apr. 16, 1897
11752	Oct. 19 "	18390	Aug. 2, "	18187	June 1, "
12081	Dec. 15 "	18464	Aug 6, "	18384	Aug 1, "
12185	Jan. 2 1895	18496	" 12, "	18465	Aug 6, "
		18506	" 12, "	30391	Apr. 28, 1903
		18513	" 12, "		

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September 28, 1912

C.S. marked on B 2446

10.25 H. 3044 041318 Miss Leavitt.

Estimates by Argelander's Method.

~~AM 4608 Feb. 5, 1904~~
~~var n.s < q~~

Ab 681 Jan. 21, 1907
o 2 v 11.6 10
11.50
v 3 p 11.4 10

AM 4608 Feb. 5, 1904
p 2 v 11.9 05
11.95
v 1 q 12.0 05

Ab 711 Feb. 6, 1900
too few.

Ab 110 Dec. 8, 1898
Images trailed.

Ab 598 Dec. 15, 1899
too few.

Ab 651 Jan. 3, 1900
l 2 v 10.9 05
10.85
v 1 m 10.8

Ab 5359, Oct. 13, 1904
too few.

Ab 1758
too few.

Ab 1772
too few.

Ab 6926, Nov. 1, 1905
var n.s < q" 12.1

Ab 5980, Feb. 11, 1905
var. n.s < q" 12.1

Ab 1223, Feb. 8, 1901
var. n.s < r" 12.6

Ab 1226
too few.

Ab 1827
too few.

Ab 2034
too few.

Ab 2096
too few.

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1910phae.proj.1029M

September 28, 1912

H. 3044 continued.

Ab 2112
Images elongated too faint.

Ab 2202, Jan 17, 1902
var. n.s. < "q" 12.1

Ab 4441 Dec. 26, 1903
l 2 v 10.9 .05
v 1 m 10.8 10.85 .05

Ab 2321, Feb. 12, 1902
p 2 v 11.9 .00
v 2 q 11.9 11.90 .00

Ab 5268 Sept. 30, 1904
h 1 v 9.9 .00
v 2 k 9.9 9.90 .00

Ab 2370 March 1, 1902
o 1 ~~p~~ v 11.5 .00
p 2 v 11.5 11.50 .00

AM 191
images too faint.

Ab 4512, Jan. 10, 1904
o 1 v 11.5 .05
p 1 v 11.6 11.55 .05

Ab 5664. Dec. 4, 1904
~~p 1 v~~ 11.8 .05
~~v 2 q~~ 11.9 11.85 .05
~~q 2 b~~

Ab 5588
too faint.

Ab 6851 Oct. 16, 1905
var. n.s. < "q" 12.1

Ab 2869, Oct. 7, 1902
var. n.s < "q" 12.1

Ab 4526 Jan. 15, 1904
~~v~~ o 2 v 11.6 .05
v 2 p 11.5 11.55 .05

Ab 6089 March 1, 1905
var. n.s < "q" 12.1

Ab 2145 Jan. 3, 1902
var. n.s < "q" 12.1

Ab 2959, Oct. 31, 1902
var. n.s < "q" 12.1 Image elongated

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1910phae.proj.1029M

September 28, 1912

H. 3044 continued

Ab6672
two pos.

12 10

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1910phae.proj.1029M

October 1, 1912

8 45 H. 3044 continued.

Am 3287 Dec. 10, 1904

t 2 v 13.9 05
v 1 w 13.8 13.85 05

Ab 5351 Oct. 7, 1904

k 1 v 10.2 05
~~k'~~ v 2 k' 10.1 10.15 05

Ab 6012 Feb. 16, 1905

t. p. in region.

Ab 3037

t. p.

Ab 3094 Dec. 23, 1902

p 2 v 11.6 00
v 1 p. 11.6 11.60 00

Ab 5782 Dec. 29, 1904

p 2 v 11.9 05
v 1 g 12.0 11.95 05

Ab 5803 Jan. 5, 1905

var n.s < p. 11.7

Ab 3211 Jan. 23, 1903

k 3 v 10.4 10
v 1 k' 10.2 10.3 10

Ab 3274

t. p.

Ab 3298 Feb. 14, 1903

k 2 v 10.3 10
v 2 k' 10.1 10.2 10

Ab 1936, Nov. 1, 1901

var. n.s < "g" 12.1

Ab 3386 March 2, 1903

k 2 v 10.3 05
v 1 k' 10.2 10.25 05

Ab 3971

t. p.

Ab 4140, Oct. 30, 1903

k 3 v 10.40 10
v 1 k' 10.2 10.30 10
very faint.

Ab 4189 Nov. 9, 1903

k 3 v 10.4 03
v 0 k' 10.3 10 43 13
k' 1 v 10.6 17

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1910phae.proj.1029M

October 1, 1912

H 3044 cont.

Ab 4230 Nov. 19, 1903
k 2 v 10.3 10.25 05
v 1 k' 10.2 05

Ab 4346 Dec. 11, 1903
k 3 v 10.4 10.25 15
v 2 k' 10.1 15

Ab 4368 Dec. 14, 1903
k 2 v 10.3 10.20 10
v 2 k' 10.1 10

Ab 3137 Jan. 1, 1903
m 1 v 11.1 11.15 05
v 2 o 11.2 05

AM 4044 Jan. 25, 1906
var. n.s. < "q" 12.1

AM 4111 Feb. 16, 1906
var. n.s. < "p"

AM 4533 Aug. 24, 1906
var. n.s. < "p". 11.7
image elongated.

AM 3261 Dec. 5, 1904
var. n.s. < "q" 12.1

AM 3345 Jan. 25, 1905
var. n.s. < "m" 10.9

AM 3834 Aug 25, 1905
o 1 v 11.5 11.50 00
v 2 p 11.5 00

AM 2354 Oct. 30, 1903
l 1 v 10.8 10.75 05
v 2 m 10.7 05

AM 2393 Dec. 9, 1903
t. p.

AM 2408 Dec. 12, 1903
k' 2 v 10.5 10.50 00
v 2 l 10.5 00

AM 2415 Dec. 17, 1903
k' 2 v 10.5 10.50 00
v 2 l 10.5 00

AM 2514 April 9, 1904
var. n.s. < "m" 10.9
plate flaw; images elongated

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October 1, 1912.

H. 3044, cont.

AM 2957 Aug. 17, 1904
k ≠ 2 v 10.3 05
v 1 k' 10.2 10.25 05

AM 1518 Aug 22, 1902
var. n.s. < "q" 12.1

AM 1609 Oct. 6, 1902
var. n.s. < "o" 11.4

AM 1629 Oct. 9, 1902
var. n.s < "p" 11.7

AM 1735 Dec. 4, 1902
Broken not meas.

AM 1748 Dec. 6, 1902
var. n.s < "q" 12.1

AM 1763 Dec. 22, 1902
var. n.s < "p" 11.7

AM 1823 Feb. 20, 1903
k 1 v 10.2 00
v 2 k' 10.2 10.20 00

AM 346 Dec. 5, 1899
k' 1 v 10.4 05
v 2 l 10.5 10.45 05

AM 357 Dec. 22, 1899
var. n.s. < "m" 10.9

AM 375, Feb. 26, 1900
t. p.

AM 673 Sept. 19, 1900
k 1 v 9.9 00
v 2 k 9.9 9.90 00

AM 208 Oct. 11, 1899
var. < "n"
"n" n.s. 10.95

AM 238 Oct. 24, 1899
too near edge

AM 256 Oct. 27, 1899
l 1 v 10.8 05
v 2 m 10.7 10.75 05

AM 342
t. p.

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1910phae.proj.1029M

October 1, 1912

H. 3044 cont.

AM 679 Sept. 20, 1900
h 3 v 10.1 05
v 1 k 10.0 10.05 05

AM 729, Dec. 8, 1900
var. n.s. < "q" 12.1
plate scratched in region.

AM 1124 Dec. 4, 1901
var. n.s. < "m" 10.9
badly scratched.

AM 1153 Feb. 28, 1902
t. p.

AM 1308
does not converge.

AM 2196, Aug 12, 1903
var. n.s < "s" 13.0

AM 2226 Aug 19, 1903
var. n.s < "q" 12.1

AM 2305 Oct. 8, 1903
n 3 v 11.1 10
v 1 o 11.3 11.20 10

AM 2345 Oct. 21, 1903
n 2 v 11.1 10
v 1 m 10.9 11.00 10

AM 3031 Sept. 10, 1904
h 1 v 9.9 05
v 3 k 9.8 9.85 05

AM 3137 Oct. 13, 1904
k 2 v 10.3 05
v 1 k' 10.2 10.25 05

AM 3219 Nov. 11, 1904
l 2 v 10.9 05
v 1 m 10.8 10.85 05

AM 3236 Nov. 16, 1904
m 1 v 11.0 05
v 1 n 10.9 10.95 05

AM 3896 Sept. 18, 1905
o 1 v 11.5 05
v 1 p 11.6 11.55 05

AM 3919 Sept. 29, 1905
p 2 v 11.9 05
v 1 q 12.0 11.95 05

10 45

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October 3, 1912

H 3044 cont.

9 20

AM 3934, Oct 5, 1905

~~var. n.s. < "g"~~

s 1 v 13.1 20

v 2 t 13.5 13.30 20

AM 4001 Nov. 28, 1905

var. n.s. < "g" 12.1

AM 4094 Dec. 28 1905

var. n.s. < "o" 11.4 pon.

AM 5272 Jan. 22, 1908

too pon.

10m out to hunt for plate for miss Leavitt.

AM 7874 Oct. 14, 1911.

var. n.s < m 10.9 pm.

AM 6818, Dec. 17, 1909

var. n.s < o 11.4 pm.

AM 4702 Nov. 16, 1906

p 2 v 11.9 11.95 05

v 1 g 12.0 05

AM 4723 Dec. 13, 1906

m 1 v 11.0 10

10.90

v 2 n 10.8 10

AM 7309 Sept. 23, 1910

Plate trailed. Trail of "d" superpnd on var. Cannot estimate.

10.00

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October 9, 1912

142539

Comparison Stars for Brorsen's III – II3 of which the latter II3 is thought to be var? by T.C.H. Brorsen

I 6344

~~II3 / III~~

III > II3

III < 103

I ~~6344~~

~~III – II3~~

~~III – ?~~

ab 11609

III > II3

III < 103

I 34127

III > II3

III < 103

ab 11791

III > II3

III < 103

I 14603

III > II3

III < 103

ab 12382

III > II3

III < 103

ab 13127

III > II3

III < 103

##

ab 13089

III > II3

III < 103

ab 10617

~~Same~~ III is also 103

II3 n.s.

Oct. 18, 1912 Observations by A.J.C.

Marked on ab 13127

ac 12382

III ? 3 II.3

ab 10699

III > II3

III < 103

ac 13059

III 4 II.3

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1910phae.proj.1029M

Oct 18, 1912

Observations by A. J. C.

Ae 13034
11.1 5 11.3

Ae 13089
11.1 4 11.3

Ae 10617
11.1 2 N

Ae 10377
11.1 2 N

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1910phae.proj.1029M

October 22, 1912

H 3044 (cont.)

9 40 AM 7781
var. n.s< K' 10.3

AM 7832
var. n.s.< K' 10.3

AM 4579
var. n,s < g. 12.1

AM 4637
var. n.s < g. 12.1

AM 4645
var. n.s< fp.
~~a 1 v~~
~~v 2 n~~

AM 5215 Oct. 16, 1907
m 1 v 11.0 10
v 2 n 10.8 10 90 10

AM 5235
t. fp.

AM 5835 Sept. 16, 1908
K3 v 10.4 10
v 1 K' 10.2 10.3 10

AM 5877 Oct. 25, 1908
l 2 v 10.9 10.85 05
v 1 m 10.8 05

AM 6012
var. n.s.< fp. 11.7

AM 6610
var. n.s.< fp. 11.7

AM 6675
var. n.s.< fp. 11.7

AM 6699
var. n.s. < g. 12.1

AM 6740
var. n.s.< g. 12.1

AM 5924
t. fp. long trail on plate -

AM 6666 Oct. 12, 1909
var. n.s < g. 12.1

AM 7066
var. n-s < g. 12.1

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1910phae.proj.1029M

October 22, 1912

3044 (cont.)

AC 3955
t.p.

AC 8152, Jan. 11, 1907
K | v 10.2 10.20 00
v | K' 10.2 00
10.25 – mag uncertain; plate poor

11.50 AM 6603 Sept. 18, 1909
p | v 11.8 11.90 10
v | g 12.0 10

AM 8019
var. n.s. < l 10.7

AM 7882
var. n.s. < m. 10.9

AM 7790
var. n.s. < l. 10.7

AM 7665
var. n.s. < l. 10.7

AM 7315
var. n.s. < m 11.0

AM 6772
var. n.s. < g. 12.1

AM 6621
var. n.s. < g. 12.1

AM 6733
var. n.s. < g 12.1

AM 6812
var. n.s < m 11.0

AM 6719
var. n.s < g. 12.1

12.20.
12.45

AM 7297
var. n.s. < m. 10.9

AM 7343
var. n.s. < m. 10.9

AM 7771
var. n.s. < 0 11.4

AM 7985
t. p.

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1910phae.proj.1029M

October 22, 1912

H 3044 (cont.)

AM 5909 Nov. 22, 1908

m 2 v	11.2		05
		11.25	
v 1 o	11.3		05

AM 5860 Sept. 29, 1908

k' 1 v	10.4		00
		10 40	
v 3 l	10.4		00

AM 5226 Oct. 23, 1907

l 1 v	10.8		05
		10.75	
v 2 m	10.7		05

AM 5242 Nov. 2, 1907

k' 2 v	10.5		00
		10.50	
v 2 l	10.5		00

AM 5274
t. p.

AM 4502
var. n.s. < q

1.00

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1910phae.proj.1029M

October 24, 1912

H. 3044 (cont.)

q 20 AM 4553 Sept. 5, 1906
r 2 v 12.8 12.85 05
v 1 r 12.9 05

AM 4578
var. n. s. < r. 12.6

AM 4029
var. n. s. < r 13.0

AM. 4037
var. n. s. < 0 11.4

AM 3887 Sept. 16, 1905
q 3 v 12.4 12.45 05
v 1 r 12.5 05

AM 3949 Oct. 9, 1905
r 1 v 12.7 12.80 10
v 1 s 12.9 10

q 40
q 50 AM 3979
var. n. s. < q 12.1

AM 4042
t. fo.

AM 4066
var. n. s. < q. 12.1

AM 4636
var. n. s. < q. 12.1

AM 4689 Nov. 13, 1906
q 2 v 12.3 12.40 10
v 1 r 12.5 10

AM 5103
var. n. s. < r. 12.6

AM 5130
var. n. s. < fo. 11.7 double images

AM 5301 Feb. 5, 1908
~~n~~ n 3 v 11.3 11.30 00
v 1 0 11.3 00

AM 5828 Sept. 15, 1908
K 3 v 10.6 10.60 00
v 1 K' 10.6 00

AM 5903 Nov. 18, 1908
0 1 v 11.5 11.50 00
~~r~~ 2 fo. 11.5 00

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1910phae.proj.1029M

October 24, 1912

H 3044 (cont.)

AM 3830 Aug. 23, 1905
m 1 v 11.1 .05
v 2 v 11.2 11.15 .05

AM 3309
var. m. S < m 10.9

AM 3180 Nov. 2, 1904
K' 3 v 10.6 .00
v 1 l 10.6 10.60 .00

AM 3063 Sept. 20, 1904
h 3 v 10.1 .05
v 1 K 10.0 10.05 .05

AM 2972 Aug. 19, 1904
K 1 v 10.2 .05
v 2 K' 10.1 10.15 .05

AM 2893 July 30, 1904
l 1 v 10.8 .05
v 2 m 10.7 10.75 .05

AM 2484
var. m. S < m. 10.9

AM 2389 Nov. 20, 1903
K 3 v 10.4 .10
v 1 K' 10.2 10.30 .10

AM 2365 Nov. 14, 1903
K' 2 v 10.5 .00
v 2 l 10.5 10.50 .00

AM 2284
var. m. S < q. 12.1

~~10.30~~

AM 2145
var. m. S. < p. 11.7

AM 1784 Jan. 31, 1903
l 3 v 11.0 .10
v 1 m 10.8 10.90 .10

AM 1836 March 14, 1903
l 2 v 10.9 .10
v 2 m 10.7 10.80 .10

AM 1693 Nov. 18, 1902
r 1 v 12.7 .10
v 1 S 12.9 12.80 .10

AM 1671
var. m. S < p. 11.7

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1910phae.proj.1029M

October 24, 1912

H 3044 (cont.)

AM 1578
var. n. s. < p. 11.7

AM 1485
var. n. s. < g. 12.1

AM 1115
t. p.

AM 1067
var. n. s. < p. 11.7

AM 706
var. n. s. < m. 10.9

AM 629 Sept. 3, 1905
K 1 v 10.2 05
v 2 K' 10.1 05
10.15

AM 323 Nov. 28, 1899
K' 2 v 10.5 05
v 3 l 10.4 05
10.45

11 15
11 45 AM 168
var. n. s. < o- 11.4

AM 135
var. n. s. < p. 11.7

AM 177
var. n. s < m. 10.9

AM 279 Nov. 13, 1899
K' 1 v 10.4 05
v 2 l 10.5 05
10.45

AM 347 Dec. 5, 1899
K 2 v 10.3 05
v 1 K' 10.2 05
10.25

AM 637 Sept. 4, 1900
g 3 v 10.1 20
v 1 h 9.7 20
9.90
11.50

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1910phae.proj.1029M

October 25, 1912

3044 (cont.)

9 15

am 716 Nov. 13, 1900
0 2 v 11.6 00
v ? p. n. s; 11.6? 11.60 00

am 1107
var. n. s. < p. 11.7

am 1532
var. n. s. < m. 10.9

am 1689
var. n. s < q. 12.1

am 1710
var. n. s. < p 11.7

am 1802
K' 1 v 10.4 00
v 3 l 10.4 10 40 00

am 2125
var. n. s. < r 12.6

am 2258
var. n. s < q. 12.1

am 2298 Sept. 30, 1903
0 2 v 11.6 05
v 2 p. 11.5 11.55 05

am 2370 Nov. 16, 1903
K' 1 v 10.4 00
v 3 l 10.4 10.40 00

am 2447 Jan 13, 1904
m 1 v 11.1 05
v 2 0 11.2 11.15 05

am 2930 Aug. 5, 1904
K' 2 v 10.5 05
v 3 l 10.4 10.45 05

am 3040 Sept. 16, 1904
K h 2 v 10.0 00
v 1 K 10.0 1000 00

am 3143 Oct. 14, 1904
h 3 v 10.1 03
v 0 K' 10.1 10.13 03
v 1 K' 10.2 07

am 3186 Nov. 3, 1904
l 2 v 10.9
v 2 m 10.7

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1910phae.proj.1029M

October 25, 1912

H 3044 (cont.)

AM 3253
multiple image.

AM 3781
l 3 v 11.0 10
v l m 10.8 10.90 10

AM 3847 Sept. 5, 1905
0 2 v 11.6 05
v 2 p. 11.5 11.55 05

9 45

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1910phae.proj.1029M

October 26, 1912

H. 3044 crit.

11 35

	Date.	S.T.	E4
B8703	Oct. 5, 1892	442	8
m 2 v			
v 3 m			
B10673	Nov. 18, 1893	2 25	10
var. n.s.(s.			
B10691	Nov. 20, 1893	319	12
var. n s (w			
B12456	Nov. 9, 1894	343	11
r 2 v			
v diffuse			
v 4 ~~te~~			
B12620	Nov. 16, 1894	705	10
r 2 v			
v 2 s			
B18365	Jan. 22, 1897	433	10
t 3 v			
v 1 u			
B17282	Aug 27, 1896	310	14
K 1 v			
v 1 K'			
B17893	Nov. 12, 1896	530	11
o 2 v			
v 1 fp Images elongated			
B18103	Nov. 28, 1896	435	12
fp 2 v			
v 3 q			
B18135	Nov. 30, 1896	542	11
q 1 v			
v 3 r			
B14604	Sept. 11, 1895	314	10
q 3 v			
v 1 r			
B14626	Sept. 13, 1895	144	10
q 3 v			
v 2 r			
B14755	Sept. 28, 1895	112	10
fp 1 v			
v 2 q			
B15037	Oct. 30, 1895	325	10
K 1 v			
v 2 K'			

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1910phae.proj.1029M

October 26, 1912

H 3044 (cont.)

	Date	S.T.	Ex.	
B 5730	Sept. 13, 1890	342	60	1230
u 2 v				
v 2 w				
B 11934	Aug 14, 1894	220	10	
u 2 v				
w n.s.				
1205				
1215 B 20227	Aug 31, 1897	251	10	
p 1 v				
v 3 q				
B 20739	Nov. 15, 1897	538	10	
w 1 v				
v 2 x				
B 20885	Dec. 1, 1897	217	11	
t 1 v				
v 1 v				
B 20886	Dec. 1, 1897	231	10	
var. n.s. for				
s off edge of plate.				
B 20956	Jan. 10, 1898	615	10	
r 1 v				
v 2 s				
1220				

B 22118	Nov. 2, 1898	545	11	
r 1 v				
v 2 s				
B 22403	Dec. 31, 1898	517	12	
n 2 v				
v 1 o				
B 24146	Sept. 15, 1899		10	
n 1 v				
v 1 o				
1235				

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1910phae.proj.1029M

October 31, 1912

H 3044 (cont.)

9 35 B38278 Oct 17, 1907 438 10
l m 1 v 10.8
m 1 v 10.70 10 10
v 3 k 10.6

B33011 Jan. 9, 1904 615 10
m 1 v 11.1 05
11.15
v 2 o 11.2 05

B34757 Aug 22, 1904 207 10
h 1 v 9.9 00
9.90
v 2 K 9.9 00

B34976 Sept. 8, 1904 331 61
g 3 v 10.1 15
9.95
v 1 h 9.7 15

B35072 Oct 12, 1904 215 12
h 2 v 10.0 00
1000
v 1 K 10.0 00

B35100 Oct. 14, 1904 236 12
K 1 v 10.4 00
10.40
v 3 l 10.4 00

B36821 Aug 22, 1905 244 11
m 1 v 11.1 05
11.15
v 2 o 11.2 05

B28711 Oct. 8, 1901 333 10
var. m.s. < g. 12.1

B29033 Dec. 28, 1901 648 10
var. m.s. < s. 13.0

B29120 Feb. 12, 1902 625 10
p 1 v 11.8 00
11.80
v 3 g 11.8 00

B30638 Sept. 22, 1902 344 10
var. m.s < s 13.0

B31019 Nov. 3, 1902 247 10
r 3 v 12.9 .23
v 0 s 13.0 13.13 13
t 2 t 13.5 37

B32676 Oct. 8, 1903 235 10
o 2 v 11.6 05
11.55
v 2 p 11.5 05

B32735 Oct. 9, 1903 523 10
p 1 v 11.8 05
11.85
v 2 g 11.9 05

B32945 Dec. 23, 1903 346 14
m 2 v 11.1 15
10.95
v 2 n 10.8 15

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1910phae.proj.1029M

October 31, 1912

3044 (cont.)

B 32958 Dec. 24, 1903 212 10
K'2v 10.5 05
v 1 l 10.6 10.55 05

B 24491 Nov. 11, 1899 215 11
K'1v 10.4 05
v 2 l 10.5 10.45 05

B 25951 Sept. 3, 1900 323 10
h 3 v 10.1 03
K 0 v 10.1 10.13 03
v 1 K' 10.2 07

B 26364 Oct. 3, 1900 234 10
K'1v 10.4 10
v 1 l 10.6 10.50 10

B 26662 Nov. 19, 1900 336 11
g 1 v 12.2 10
v 2 r 12.4 1230 10

B 26684 Nov. 20, 1900 256 12
var. n.s. < g. 12.1

B 23741 July 29, 1899 108 11
u 2 v 14.1 00
v 1 w 14.1 14.10 00

B 23951 Aug. 18, 1899 157 10
r 1 v 12.7 00
v 3 s 12.7 1270 00

B 24042 Sept. 1, 1899 119 11
p 3 v 12.0 00
v 1 g 12.0 12.00 00

B 24078 Sept. 6, 1899 234 14
p 2 v 11.9 05
v 1 g 12.0 11.95 05

B 24273 Sept. 30, 1899 258 10
0 1 v 11.5 00
11.5 11.50 00
v 2 p 10.15

I 267 10.30
var. n.s. < 0 11.4 plate badly fogged

I 427
0 2 v 11.6 05
11.5 11.55 05
v 2 p plate badly fogged.

I 2034
var. n. s. < p. 11.7

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1910phae.proj.1029M

October 31, 1912.

H 3044 (cont.)

I 2579

K 1 v 10.2 10.20 00
10.2

v 1 K' plate poor. 00

I 2580

K 1 v 10.2 10.20 00
10.2 00

v 1 K' fair.

I 2947

h 1 v 9.9 9.90 00

v 2 K 9.9 00

I 2982

h 2 v 10.0 05

v 2 K 9.9 9.95 05

1045

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1910phae.proj.1029M

October 31, 1912

041318 # 3044 cont.

Direct Estimate North wp.

11 10 B24146 B24042 B32945
11.5 12.2 10.9

I2982 B23951 B32735
10.2 12.7 11.8

I2947 B23741 B32676
10.0 14.0 11.5

I2580 B26684 B31019
10.3 n.s.< 12.1 13.1

I2580 B26662 B29120
10.3 12.2 11.8

I2034 B26364 B30638
n.s.< 11.7 10.4 var. n.s.< 14.2

I427 B25951 B29033
11.5 10.0 var. n.s.< 13.9

I267 B24491 B28711
var. n.s.< 11.4 10.4 var. n.s.< 12.1

B24273 B32958 B36821
11.5 10.8 11.1

B24078
11.9

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1910phae.proj.1029M

October 31, 1912

3044 (cont.)

B35100	B18365	B10691
10.3	13.9	14.6
B35072	B20227	B12456
10.2	11.6	13.0
B34976	B20739	B12620
9.9	14.1	13.6
B34757	B20885	B12727
10.0	n.s< 13.9	12.0
B33011	B20886	B14604
11.3	n.s<12.6	12.4
B38278	B20956	B14626
11.2	12.7	12.4
12 20		
12 30 B22118	B5730	B14755
12.8	14.2	11.6
B22201	B8703	B15037
too near dge	10.8	10.2
vv. n.s<12.1		
	B10673	B17282
B22403	n.s<14.2	10.3
11.0		

1.00

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1910phae.proj.1029M

October 31, 1912

H 3044 (cont.)

1 50 B17644
10.1

B17893
11.0
difficult to meas.

B1810 3
11.8

B1819-
12.0

1.52

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1910phae.proj.1029M

November 5, 1912

H 3044 cont.

Direct estimate; south up.

11 00

B24146	I267	B34757
11.5	nS < 12.1	10.0
B26364	I427	B34976
10.5	11.3	9.8
B26662	I ~~240~~ 2034	B35072
12.1	n.S < 11.7	10.1
B26684	I2579	B35100
n.S. < 12.1	10.4	10.2
B23741	I2580	B36821
14.6	10.3	10.9
B23951	I2947	B28711
12.7	10.1	n.S. < 12.1
B24042	I2982	B29033
12.5	10.0	14.3
B24078	B38278	B30638
11.9	11.2	14.4
B24273	B33011	B29120
11.4	11.3	11.7

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1910phae.proj.1029M

November 5, 1912

H. 3044 cont.

B31019	B17282	B10673
12.9	10.2	14.1
B32676	B15037	B8703
11.3	10.2	10.8
B32735	B14755	B5730
11.3	11.5	14.3
B32945	B14626	B20956
10.8	12.5	12.7
B32958	B14604	B20886
10.8	12.5	m.s < 12.6
B24491	B12727	B20885
10.7	12.5	m.s < 13.7
B25951	B12620	B20739
10.0	12.8	13.9
B17893	B12456	B20227
11.4	12.9	11.7
B17644	B10691	B18365
10.3	14.6	13.9

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1910phae.proj.1029M

November 5, 1912

H 3044 (cont.)

B22403
10.9

B22118
12.7

B18135
12.0

B18103
11.8

12.45

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1910phae.proj.1029M

~~November 21, 1910.~~

H. 3044 (cont.)

Direct Estimate; north up.

9 45	Ab 5664	Ab 4230	Ab 1936
	11.7	16.5	n.s.(12.1
	Ab 5351	Ab 6089	Ab 651
	10.3	n.s.(12.1	10.9
	Ab 3298	Ab 6672	Ab 681
	10.4	t.p.	11.4
	Ab 6851	Ab 3137	Ab 711
	n.s.(11.0	10.8	t.p.
	Ab 6926	Ab 2321	Ab 1223
	n.s(12.1	11.9	n.s(13.7
	Ab 3986	Ab 2370	Ab 1226
	10.4	11.4	t.p.
	Ab 3971	Ab 2869	Ab 1758
	t.p.	n.s(12.1	n.s.(10.9
	Ab 4140	Ab 1772	Ab 2034
	10.8	t.p.	n.s(10.9
	Ab 4189	Ab 1827	Ab 2096
	10.8	n.s(12.1	t.p.

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November 21, 1912

H. 3044 (cont.)

Ab 2112 t.p.	Ab 2959 n.s. < 12.6	Ab 5882 n.s. < 12.6
Ab 2145 n.s. < 12.1	Ab 3094 11.5	Ab 5980 n.s < 12.1
Ab 2202 n.s. < 12.1	Ab 3211 10.2	Ab 11493 t.p.
Ab H346 10.5	Ab 3274 t.p.	Ab 12021 n.s < 12.1
Ab 4368 10.5	~~Ab~~ Ab 3287 13.9	11.15 12.10
Ab 4441 10.8	Ab 5359 t.p.	Ab 12031 n.s < 11.7
Ab 4512 11.1	Ab 5588 t.p.	Ab 12044 n.s < 11.4
Ab 4526 11.5	Ab 5782 13.9	Ab 12068 n.s. < 12.1
Ab 4608 12.3	Ab 5803 n.s. < 12.1	Ab 12104 n.s. < 10.9

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1910phae.proj.1029M

November 21, 1912

H 3044 (cont.)

Ab 12071	Ab 12647	Ab 9916
var. n.s. < 12.6	11.8	11.5
Ab 12131	Ab 12690	Ab 9941
n.s. < 10.9	11.6	11.8
Ab 12139	12.30 12.50 Ab 12707	Ab 9990 57 3
n.s. < 11.4	10.9	n.s. < 10.3
Ab 12165	Ab 12760	Ab 9963
12.2	10.0	11.7
Ab 12250	Ab 12876	Ab 9972
n.s. < 11.7	n.s. < 10.7 plate fog.	11.9
Ab 12262	Ab 12878	Ab 10057
11.1	11.5	n.s. < 11.7
Ab 12300	Ab 12942	Ab 10143
10.9	n.s. < 11.7	n.s. < 11.0
Ab 12304	Ab 9808	Ab 10154
10.8	10.9	n.s. < 12.1 fogged
Ab 12615	Ab 9873	Ab 10202
fogged.	11.0	n.s. < 11.0 fogged

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November 21, 1912

H 3044 (cont.)

Ab 10906	Ab 13367	Ab 11351
n.s. < 10.9	10.2	12.2
Ab 10938	Ab 9214	Ab 11484
n.s. < 11.7	11.4	n.s. < 10.9 very faint plate
Ab 10988	Ab 9261	
n.s. < 11.0	n.s. < 11.4	
Ab 11021	Ab 9272	
11.8	11.7	
Ab 11166	Ab 9762	
n.s. < 12.1	10.2	
Ab 11212	Ab 9243	
t p.	n.s. < 11.7	
Ab 13298	Ab 9252	
t p.	11.8	
Ab 13315	Ab 11233	
9.9	n.s. < 12.1	
Ab 13341	Ab 11246	
9.8	n.s. < 13.0	

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1910phae.proj.1029M

November 23, 1912

H 3044 (cont.)

9 20	AM 3137 10.2	AM 3919 13.0	AM 208 11.0
	AM 3031 10.1	AM 3896 11.8	AM 673 10.0
	AM 2345 10.9 scratched in rg.	AM 3236 11.5	AM 375 t.p.
	AM 2305 11.4 fogged.	AM 3219 10.9	AM 357 n.s.< 10.9
	AM 2226 n.s.< 12.1	AM 4044 n.s.< 12.1	AM 346 10.5
	AM 2196 n.s.< 13.0	AM 679 9.9	AM 1823 10.3
	AM 1153 t.p.	AM 342 10.0 Iso.	AM 1763 11.5
	AM 1124 film slanted	AM 256 10.6	AM 1748 11.6
	AM 729 n.s.< 12.6	AM 238 t.p.	AM 1629 n.s.< 11.7

10,80

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November 23, 1912

H. 3044 cont.

10 45	am 1609	ab 7373	ab 8256
	n.s. < 11.5	n.s < 11.4	9.8 images trailed
	am 1518	ab 7863	ab 8319
	n.s. < 12.6	n.s. < 11.7	9.9
	am 2957	ab 7876	ab 8961
	10.2	n.s < 11.0	10.5
	am 2514	ab 7966	ab 9118
	n.s. < 11.0	12.7	10.6
	am 2415	ab 7986	ab 9138
	10.5	12.2	10.8
	ab 7120	ab 8066	ab 9157
	n.s < 12.6	n.s. < 10.9	11.4
	~~c.s.t less than~~		
	c.s.t = 11.6 var.? def.?	ab 8~~0~~143	ab 9204
		10.4	11.1
	ab 7152	Q	
	t.p. fogged	ab 8073	am 2408
		n.s. < 10.7	10.4
	ab 7264		
	t.p. trailed + fogg'd.	ab 8230	am 2393
		9.9	10.6
	ab 7286		
	12.8	ab 8244	am 2354
		9.8	10.8

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1910phae.proj.1029M

November 23, 1912.

H 3044 (cont.)

AM 3834
11.4

Interrupted
for 15m

AM 3345
n.s. < 10.9

AM 3261
n.s. < 11.4

AM 4533
n.s. < 11.7

AM 4111
n.s. < 12.1

11.4/5

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1910phae.proj.1029M

November 23, 1912

H 30 44 (cont)

Direct estimate; south up.

12.15 ab8143
10.7

ab7120
n.s. 12.1

ab8066
n.s. 11.7

ab7986
12.1

ab7966
n.s. 12.1

ab7876
n.s. 11.0

ab7863
n.s. 11.0

ab7373
n.s. 11.0

12.30

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1910phae.proj.1029M

December 3, 1912

H 3044 (cont.)

Direct estimate; south wp.

10.00	AM 2415	AM 346	AM 4044
	11.9	10.3	12.7
	AM 2514	AM 357	AM 3219
	n.s. < 11.0	n.s. < 10.7	10.9
	AM 2957	AM 375	AM 3236
	10.3	n.s. < 10.3	11.4
	AM 1518	AM 673	AM 3896
	12.5	9.9	12.1
	AM 1609	AM 208	AM 3919
	n.s. < 12.1	10.9	12.4
	AM 1629	AM 238	AM 729
	n.s. < 12.1	t p.	n.s. < 12.1
	AM 1748	AM 256	AM 1124
	n.s. < 12.1	10.8	n.s. < 11.0
	AM 1763	AM 342	AM 1153
	n.s. < 11.4	10.1 2 so.	t p.
	AM 1823	AM 679	AM 2196
	10.2	10.0	n.s. < 13.0

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1910phae.proj.1029M

December 3, 1912

H. 3044 (cont.)

		South up.
am 2226 n.s < 13.0	am 4111 n.s < 12.1	ab 9157 11.5 uncertain.
am 2305 11.7	am 4533 11.7	ab 9138 10.6
am 2345 10.9	am 3261 n.s. < 11.7	ab 9118 10.5
am 3031 9.9	am 3345 n.s. < 11.0	ab 8961 10.3
am 3137 10.1	am 3834 11.2	ab 8319 9.8
10.35 10.40		
	am 2354 10.7	ab 8256 9.8 elongated.
ab 6926 n.s. < 13.0		
	am 2393 n.s. < 10.9	ab 8244 9.7
ab 7286 12.7		
	am 2408 10.5	ab 8230 9.8
ab 7264 + p.		
	ab 9204 10.9	ab 8073 n.s. < 10.9
ab 7152 n.s. < 10.9		

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1910phae.proj.1029M

December 3, 1912

H 3044 (cont.)

Ab 1772 t p.	Ab 4140 10.8	Ab 5782 12.9
Ab 2869 n.s < 12.1	Ab 3971 t.p.	Ab 5588 t p.
Ab 2370 11.5	Ab 3386 10.5	Ab 5359 t p.
11.20		11.45
Ab 2321 12.0	11.35 Ab 6851 n.s < 11.0	11.50 Ab 5268 9.8
Ab 2282 n.s < 10.9	Ab 3298 10.3	Ab 3274 t p.
Ab 3137 10.9	AM 191 n.s < 11.0	Ab 3211 10.2
Ab 6672 t.p.	Ab 5351 9.9	Ab 3094 11.5
Ab 6089 n.s < 12.1	Ab 5980 n.s < 12.1	Ab 3037 t p.
Ab 4230 10.2	Ab 5882 n.s < 12.1	Ab 2959 n.s < 13.0
Ab 4189 10.8	Ab 5803 n.s < 13.0	Ab 4608 12.4

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1910phae.proj.1029M

December 3, 1912

H 3044 (cont.)

Ab 4526
11.5

Ab 4512
11.4

Ab 4441
10.8

Ab 4368
10.5

Ab 2202
n.s < 13.0

Ab 4346
10.2

Ab 2145
n.s < 13.0

Ab 2112
t p.

Ab 2096
t p

Ab 2034
n.s. < 10.9 from.

Ab 1758
n.s. < 10.9 from

Ab 1226
t p.

Ab 1223
n.s. < 13.7

Ab 711
t p.

Ab 681
11.8

Ab 651
10.8

Ab 598
t p

Ab 6012
t p.

Ab 1936
n.s. < 12.1

Ab 1827
n.s < 11.7

AM 3287
12.20 13.7
12.45 Ab 12647
11.6

Ab 12615
t p.

Ab 12304
10.8

Ab 12300
10.8

Ab 12262
11.3

Ab 12250
11.5

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1910phae.proj.1029M

December 3, 1912

H 30 44 (cont.)

Ab 12165 11.5	Ab 11493 t p.	Ab 9261 n.s. < 11.4
Ab 12139 n.s. < 11.4	Ab 11484 t p.	Ab 9214 ~~n.s. <~~ 11.4
Ab 12131 n.s. < 11.4	Ab 11351 12.1	Ab 13367 9.8
Ab 12071 n.s. < 13.0	Ab 11246 n.s < 13.0	Ab 13341 9.8
Ab 12104 t p.	Ab 11233 n.s. < 12.1	Ab 13315 9.7
Ab 12068 n.s. < 12.1	Ab 9252 11.5	Ab 13298 9.8
Ab 12044 n.s. < 11.4	Ab 9243 n.s. < 11.7	Ab 11212 t p.
Ab 12034 n.s. < 11.4	Ab 9762 10.2	Ab 11166 n.s < 12.6
Ab 12021 n.s. < 11.4	Ab 9272 11.2	Ab 11021 12.2

1.50

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1910phae.proj.1029M

December 28, 1912.

H 3044 (cont.) Direct S. up.

10.45	Ab 10988	Ab 9963	Ab 12760
	frgg'd imm	11.8	~~11.5~~ 10.8
	Ab 10938	Ab 9951	Ab 12707
	n.s. < 11.0 small	10.8 ? prov	11.2
		maybe defect seen.	
	Ab 10906	Ab 9941	Ab 12690
	n.s. < 10.7	11.7	11.3
	Ab 10202	Ab 9916	Ab 13272
	frgg'd. n.s. < 10.7	11.5	n.s. < 10.9
	Ab 10154	Ab 9873	Ab 13433
	n.s. < 11.7	10.9	10.5
	Ab 10143	Ab 9808	Ab 13517
	frgg'd. n.s. < 11.0	10.6	n.s. < 10.9
			11.10
	Ab 10115	Ab 12942	
	trailed. n.s. < 10.9	n.s. < 12.1	Am 3934
			12.7
	Ab 10057	Ab 12878	
	n.s. < 11.0	film defect.	Am 4001
		11.7	n.s. < 12.1
	Ab 9972		
	11.6	Ab 12876	Am 4034
		n.s. < 11.0	n.s. < 11.4 11.20

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1910phae.proj.1029M

December 31 ~~28~~, 1912

H 3044 (cont.)

10.10	AM 5835	AM 7781	AM 4001
	10.3	n.s. < 11.0	n.s. < 12.1
	AM 5877	AM 7832	AM 3934
	10.8	n.s. < 10.9	12.6
	AM 6012	AM 7874	AM 4637
	n.s. < 12.1	n.s. < 10.9	n.s < 12.6
	AM 6610	AM 8007	AM 4645
	n.s. < 11.7	t.p.	n.s < 12.1
	AM 6666	AM 8039	AM 4702
	n.s. < 11.7	t.p.	11.5
	AM 6675	AM 5588	AM 4723
	n.s. < 11.4	t.p.	11.1
	AM 6699	AM 5782	AM 5215
	n.s. < 11.7	12.1	10.9
	AM 6740.	AM 4579	AM 5235
	n.s. < 12.1	12.4	t.p.
	AM 6818	AM 4034	AM 5272
	n.s. < 11.4	n.s. < 11.7	t.p.
	AM 7309	10.25	10.55
	n.s. < 11.0	10.30	

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1910phae.proj.1029M

Feb. 5, 1913

Var. looked up for Roberts in region of ζ Carinae on following plates. As exact pos. wasn't given, cannot be certain about var. As far as I could see, no variation was found on the vg. Seq. marked on B19066

B8982		B24705	Feb 21, 1902
10658	Nov. 17, 1893	24949	April 5, "
11171		26842	Dec. 27, "
13520	June 3, 1895	26856	Dec. 28, "
15536	April 7, 1896	26939	Jan. 30, 1901
15930	May 22, "	26972	Feb. 26, 1901
16102	June 4, "	26991	March 23, "
16213	June 10, "	27019	March 29 "
16472	June 26, "	27089	April 10, "
16633	July 3, "	28802	Nov. 12, "
16766	July 10, "	29009	Dec. 20, "
16865	July 17, "	29196	March 26, 1902
16930	July 20, "	31212	Dec. 30, 1902
19260	May 29, 1897	31285	Jan. 16, 1903
19262	May 29, "	31347	Feb. 20, "
19468	June 9, "		
19469	June 9, "		
19667	July 1, "		
19707	July 2, "		
21118	April 2, 1898		
21327	April 30, 1898		
21359	May 2, "		
21426	May 18, "		
22414	April 3, 1899		
22779	May 9, "		

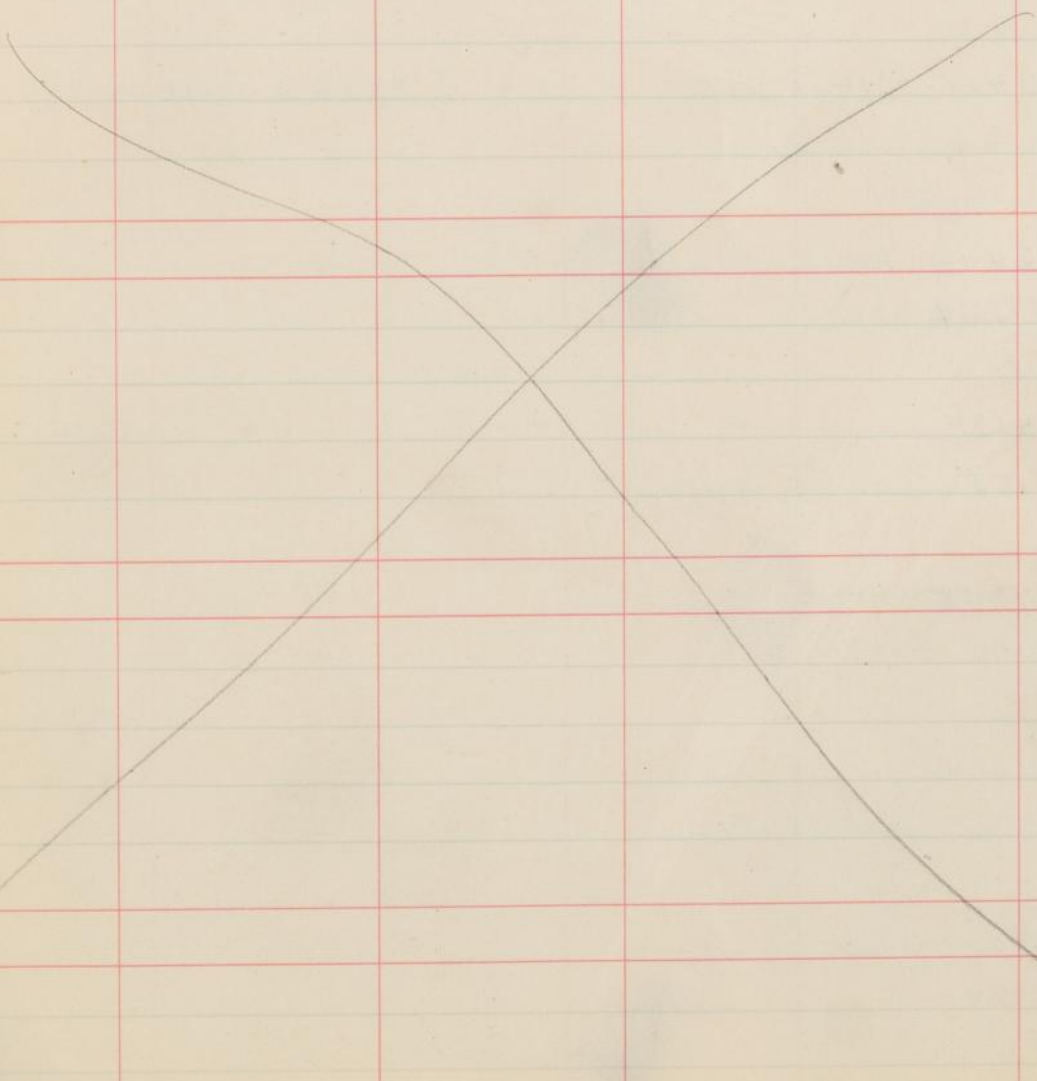
J. C. M.

See page 86 for final result after chart came May 8, 1913.

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1910phae.proj.1029M

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by mistake



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1910phae.proj.1029M

Feb. 10, 1913

Var. near +61° 2266

See letter of D'Esclaire, Jan. 30, 1913. Marked on I 21252

Direct estimate.

I 11688 Oct. 17, 1894
11.0

I 18748 Sept. 9, 1897.
10.9

I 21252 Sept. 27, 1898
10.9

I 23499 Sept. 14, 1899
10.4

I 13461 Sept. 5, 1895
10.9

I 29286 Sept. 14, 1902
11.0 ?

I 16446 Nov. 3, 1896
10.4

I 24137
11.5 Nov. 25, 1899

I 27745
11.0 Oct. 7, 1901

I 11656
10.8 Oct 15, 1894

I 16275 Oct. 25, 1896
10.9

Feb. 11, 1913

I 9462 Sept. 12 1893
br. 2 "B" / Oct. 25, 1893

I 9773
= "B"

10.5.

I 9174 Aug 10, 1893
br. 1 B

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1910phae.proj.1029M

Feb. 15, 1913

SZ Cygni mas. fr H. S. L.
Comp. star marked on I 29510

Ab 13022 March 22, 1912 2
11.2

Ab 13447 Nov. 6, 1912 11
11.3

Ab 13239 Sept. 17, 1912 6
11.2

Ab 13189 July 2, 1912 4
10.3

Ab 13285 Oct. 3 1912
no faint stars on plate.

Ab 13050 March 31, 1912 √1
9.5

Ab 13275 Oct. 1, 1912 8
10.6

Ab 13206 July 5, 1912 5
11.0

Ab 13545 Dec. 3, 1912
10.6

Ab 13078 April 8, 1912
11.0? c.s. "h" defective
Plate badly fogged.

Ab 13358 Oct. 18, 1912 10
10.6

Ab 13268 Sept 28, 1912 7
9.6

Ab 13345 Oct 16, 1912 9
10.3

Ledger made of plate above.

d 9.5
e 9.8
f 10.3
g 10.5
h 10.9
K 11.2
l 11.6
m 12.1

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1910phae.proj.1029M

February 15, 1913.

S Z Cygni (cont.) H&L

Ab 13085 April 10, 1912
11.7 near edge.

Ab 13256 Sept. 26, 1912
10.5 near edge

Ab 13281 Oct. 2, 1912
10.6 near edge

Ab 13223 July 15, 1912
7 ft. stars n. e. on plate.

Ab 13427 Nov. 3, 1912
10.6

Ab 13226 July 19, 1912
10.6

Ab 13195 July 3, 1912
10.6? Badly fogged.

Ab 13212 July 6, 1912
10.6

Ab 13246 Sept 22, 1912
11.2? not good enough

Ab 13247 Sept. 22, 1912
no ft. stars on plate.

Ab 13319 Oct. 8, 1912.
No ft stars on plate

Ab 13357 Oct. 18, 1912.
10.6

Ab 13544 Dec. 3, 1912
10.6

Ab 13399 Oct. 29, 1912
9.9

Ab 13~~207~~ 190 July 2 1912
10.5? Badly fogged.

Ab 13400 Oct. 29, 1912
9.8

Ab 13363 Oct. 19, 1912
not good for ft. stars.

Ab 13254 Sept. 25, 1912
poor!

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1910phae.proj.1029M

February 15, 1913

SZ Cygni (cont.) for H.S.L.

Ab 13269 Sept. 28, 1912
too fom.

Ab 13207 July 5, 1912
too fom.

Ab 13240 Sept. 17, 1912
too fom.

Ab 13311 Oct. 7, 1912
too fom.

Ab 13497 Nov. 19, 1912
11.3? Badly fogged.

Ab 13507 Nov. 21, 1912
11.3

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1910phae.proj.1029M

February 18, 1913

S Z Leyssi (cont) H. S. L.

I 27585 - Sept. 26, 1901 6
10.6

I 37 Oct. 10, 1889 1
10.6 poor.

I 4071 Aug 20, 1891 2
11.0: near edge.

I 4450 Oct. 5, 1891 3
10.6

I 8802 July 16, 1893 4
10.8

I 23508 Sept. 15, 1899 5
10.7

I 29510 Nov. 7, 1902 7
10.6

I 30043 Feb. 20, 1903 8
10.6

I 30046 Feb. 20, 1903 9
10.6

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1910phae.proj.1029M

February 20, 1913

SZ Cygni (cont.) H.S.L.

Ab 425 Sept. 13, 1899 1
10.6 near edge.

Ab 1736 Sept. 11, 1901 4
9.9 pon.

Ab 2978 Nov. 7, 1902 8
10.6 edge.

Ab 426 Sept 13, 1899 2
10.6 pon.

Ab 2782 Oct, 9, 1902 6
10.0

Ab 2977 Nov, 7, 1902 7
10.6

Ab 391 Aug. 14, 1899 0
10.8 scratched.

Ab 1732 Sept. 8, 1901 3
10.6

Ab 1783 Sept. 25, 1901 5
10.7

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1910phae.proj.1029M

February 26, 1913

R. X. Cassiop. for Russell. on A6 Plates to find Minimum.

Marked on A 6 2273 Max. Br.

Br. on filling plates.

A6 264 Mar. 29, 1899
662 Jan. 6, 1900
1131 " 5, 1901
1252 Feb. 17, 1901
2163 Jan. 5, 1902
2899 Oct. 14, 1902
3184 Jan 18, 1903
3193 Jan. 19, 1903
3243 Feb. 5, 1903
4426 Dec. 23, "
6132 Mar. 6, 1905
6503 July 10, "
6718 Sept. 23, "
6732 " 25, "
6746 " 27, "
6754 " 28 "
6761 Oct 1. "
6809 " 8, "
6916 " 30, "
7069 Nov. 30 "
7212 Jan 26, 1906
8002 Nov. 10, "
8088 Dec. 6, "
8800 Sept. 26, 1907
8942 Oct. 30, 1907
8992 Nov. 13, 1907
A6 9326 Mar. 10, 1908
9722 Sept. 6, 1908
9723 " 8, "
10691 Aug. 6, 1909
10789 Sept 3, "
11303 Jan. 15, 1910
11367 Feb. 10, "
11908 Sept. 9, 1910
12682 Oct. 27, 1911
12745 Nov. 18, 1 "
13375 Oct. 20, 1912
13612 Jan. 1, 1913
13649 Jan. 14, "
13744 Feb. 7, "
13751 Feb 8, "

7s on filling plates

A6 1171 Jan. 24, 1907
3256 Feb. 7, 1903
6047 Feb. 21, 1905
7940 Oct. 25, 1906

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1910phae.proj.1029M

spectra 2 54.8 +67 0.6 (1885)
Clusin 1°.

	Sp.			Cor	Obs	Reg		
	A2 A2 A5	7.9		07	7.9	8.0	f	
75	G0	7.8		71	7.8	8.46	f	
80	G5	8.0		91	8.0	8.91	e	
74	A	8.9	8.9	00	~~9.0~~ 8.9	874	d	
	F?	8.9		32	~~9.0~~ 8.9	9.12	e	
	K	8.0		117	8.0	9.17	g	
22	G	8.4		71	8.4	8.93	g	
72	G5	7.5		91	7.5	863	h	9.94 10 09
	A0 A B9	8.0	8.0	0	8.0	8.0	h	
	A2	8.0		07	8.0	8.1	a 8.46 b 8.93 c 8.74 d 9.0 e 9.62 f 10.47	912 08 08
	A				9.0			
45 47	A5?				94			912 08 08
76 71	G#?				9.5			
	G5							
					9.7			994 10 09
					10.2			
								9.94 10 09

I 24569
+67 0.6
magn.

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1910pl

R X Cassiopeiae 2 54.8 +67 0.6 (1885)

Spectra of Dm. stars within 1°

Sig. Letter	DM No.	R. A. 1855 1900	Dec. 1855 1900	DM Magn.	Ptm Magn.	Sp.			Cor Dm	Rg		
	+68° 212	2	47.0	+68 54	7.9	..	{a2 a2 a5	7.9	07	7.9	8.0	f
a	+66° 242	2	54.0	+66 50	7.8	7.75	G0	7.8	71	7.8	8.46	f
#	+66° 244	2	56.3	+66 21	8.0	8.00	G5	8.0	91	8.0	8.91	e
c	+67° 246	2	57.0	+67 48	8.8	8.74	a	8.9	80	~~9.0~~ 8.9	874	d
	+66° 245	2	57.2	+66 31	8.8	..	?	8.9	32	~~9.0~~ 8.9	9.12	e
#	+66° 246	2	59.1	+66 12	8.0	..	K	8.0	117	80	9.17	g
b	+66° 247	2	59.8	+66 51	8.3	8.22	G	8.4	71	84	8.93	g
	+67° 250	3	0.5	+67 59	7.5	7.72	G5	7.5	91	7.5	863	h
	+68° 230	3	3.8	+68 54	8.0		{a0 a Bq	8.0	0	80	8.0	k
	+66° 251	3	4.1	+66 32	8.0		a2	8.0	07	80	.81	a 8.46 L 8.93 C 8.74 d 9.0 e 9.62 f 10.47
d	+67° 248	2	58.4	+67 50	8.9		a			9.0		
e	+67° 243	2	54.1	+67 10	9.1	9.45	a5?			94		
f	+66° 243	2	56.2	+66 55	9.2	9.76	G?			9.5		
g	..						G5					
h	+67° 238	2	50.7	+67 3	9.3					9.7		
k	+67° 245	2	55.5	+67 22	9.5					10.2		

I 24569

+67 0.6

S. magn.

9.94 10 09

9.12 08 08

9.12 08 08

9.94 10 09

9.94 10 09

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1910phae.proj.1029M

March 5, 1913

R X Cassiop. for Russell. Marked on I 24569 ~~first~~ comp. star, [C.S. transferred to Ab 3193.] 2 54.9 +67 0.6

See page 83 for C.S. magn.

Ab 1818
d 1 v
v 1 e
9.40 ~~8.84~~ 9.52 12 12 964 ~~9.02~~

Ab 1877
d 1 v
v 1 e
9.40 ~~8.84~~ 9.52 12 12 964 ~~9.02~~

Ab 1252
e 1 v
v 1 f
984 ~~9.22~~ 9.98 14 15 10.13 ~~907~~

Ab 1345
e 2 v
v 2 f
~~9.32~~ 9.94 1023 ~~9.17~~ 10.16 22 07 16 1032 ~~913~~

Ab 559
e 2 v
v 1 f
9.94 ~~9.35~~ 10.04 10 09 10,13 ~~907~~

Ab 662
d 1 v
v 1 e
9.40 ~~8.84~~ 9.52 12 12 9.64 ~~9.02~~

Ab 264 ~~437~~
e 1 v
v 2 f
9.84 ~~9.22~~ 9.94 10 09 10,03 ~~897~~

Ab 437
t p.

Ab 514
e 1 v
v 2 f
9.84 ~~9.22~~ 9.94 10 09 10.03 ~~897~~

Ab 752
e 1 v
v 2 d
8.94 ~~9.01~~ 9.02 08 08 9.10

Ab 935
e 2 v
v 1 d
9.04 912 08 08 9.20

Ab 1084
f 1 v
v 1 g
10.33 10 38 05 04 10.42

Ab 1131
e 1 v
v 1 f
9.84 998 14 15 10,13

Ab 1200
t p

Ab 1691
t p.

Ab 1697
e 1 v
v 2 f
9.84 9.94 10 09 10.03

Ab 1756
e 2 v
v 1 d
904 912 08 08 9.20

Ab 1799
e 2 v
v 1 d
9.04 912 08 08 9.20

Ab 1934
e 1 v
v 2 f
9.84 994 10 09 10.03

Ab 1945
e 1 v
v 2 f
9.84 9.94 10 09 10.03

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1910phae.proj.1029M

March 5, 1913

RX Cassiop (cont)

Ab 2094 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 2221 v
e 2 v 9.94
v 2 f 10.03 9.98 04 05

Ab 3095 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 2273 v
d 1 v 9.40
v 1 e 9.64 9.52 12 12

Ab 2334 v
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ab 3112 v
e 1 v 9.84
v 2 f 10,03 9.94 10 09

Ab 1171 v
g 1 v 10.62
v 1 h 10.76 10.69 07 07

Ab 2384 v
t/o

Ab 3151 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 2499 v
e 2 v 9.94
v 2 f 10.03 9.98 04 05

Ab 3256 v
h 1 v 10.96
v 1 k 11.11 11 04 08 07

Ab 3163 v
d 1 v 9.40
v 1 e 9.64 9.52 12 12

Ab 2850 v
e 2 v 9.94
v 2 f 10.03 9.98 04 05

Ab 6047
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ab 3184 v
c 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 2899 v
e 2 v 8.94
v 2 d 9.10 9.02 08 08

Ab 2163 v
e 2 v 9.94
v 2 f 10,03 9.98 04 05

Ab 3243 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 2952 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 2200 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 3251 v
g 1 v 10.62
v 1 h 10.76 10.69 07 07

4.53 + 58.9 to near edge

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1910phae.proj.1029M

March 5, 1913

R X Cassiop. cont.

ab3385
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab6076
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab6630
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab3413
g 1 v 10.62
v 2 h 10.66 10.64 02 02

ab6132
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab6654
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab4484
e 2 v 9.94
v 2 f 10.03 9.98 04 05

ab6219
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab6676
d 1 v 9.40
v 1 e 9.64 9.52 12 12

ab4426
e 2 v 9.94
v 1 f 10,13 10.04 10 09

ab6503
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab6678
d 1 v 9.40
v 1 e 9.64 9.52 12 12

ab4148
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab6541
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab6686
e 2 v 9.04
v 1 d 9.20 9.12 08 08

ab4024
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab6588
d 2 v 9.50
e 0 v 9.74 9.72 22 02 21 t f
v 3 f 9.93

ab6014
t f.

ab6659
d e v 9.50
e 0 v 9.74 9.72 22 02 21
v 3 f 9.93

ab6711
e 1 v 9.84
v 2 f 10.03 9.94 10 09

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1910phae.proj.1029M

March 5, 1913

RX Leonis Min. cont.

Ab 6718
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 6732
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 6746
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 6754
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 6761
c 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 6774
g 1 v 10.62
v 1 h 10.76 10.69 07 07

Ab 6790
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 6799
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 6809
c 2 v 9.04
v 0 d 9.30 9 29 25 01 25
v 2 e 9.54

Ab 6900
t p

Ab 6916
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 6982
c 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 7069
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 7075
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 7179
c 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 7181
c 2 v 9.04
v 0 d 9.30 9.32 28 02 32
v 1 e 9.64

Ab 7189
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 7212
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 7237
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 7322
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 7364
e 1 v 9.84
v 2 f 10.03 9.94 10 09

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March 5, 1913

R X Cassiop. (cont.)

Ab 7434 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 174 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 7487.
t p.

Ab 223 v
t p.

Ab 7698 v
t p.

Ab 394 v.
t p.

Ab 7792 v
t p.

Ab 565 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 1914 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 710 v
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 1978 v
e 1 v 9.84.
v 2 f 10.03 9.94 10 09

Ab 3193 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 1986 v
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 155 v
g 1 v 10.62
v 1 h poorly defined 10.76 10.69 07 07

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1910phae.proj.1029M

March 6, 1913

R X Cassiop. (cont.)

Ab 7860
t p.

Ab 7958.
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 8002
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 8088.
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 8183.
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 8238
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 8252.
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 8695
e 3 v 10.04
v 0 f 10.23 10.23 19 00 19
v 1 g 10.42

Ab 8817
e 2 v 9.94 10.04 10 09
v 1 f 10.13

Ab 8952
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 8992.
e 2 v 9.94 10 04 10 09
v 1 f 10.13

Ab 9148
f 1 v 10.33 10 38 05 04
v 1 g 10.42

Ab 9190
f 1 v 10.33 10 38 05 04
v 1 g 10.42

Ab 9326
f 1 v 10.33 10.38 05 04
v 1 g 10.42

Ab 9716
f 1 v 10.33 10 38 05 04
v 1 g 10.42

Ab 9722.
e 1 v 9.84 9.98 14 15
v 1 f 10.13

Ab 9723
e 1 v 9.84 9.94 10 09
v 2 f 10.03

Ab 9868
c 2 v 9.04 9.12 08 08
v 1 d 9.20

Ab 9880
c 2 v 9.04 9.12 08 08
v 1 d 9.20

Ab 9950
e 1 v 9.84 9.94 10 09
v 2 f 10.03

Ab 10090
c 2 v 9.04 9.12 08 08
v 1 d 9.20

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1910phae.proj.1029M

March 6, 1913

RX tessiop. (cont.)

Ab 10124 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 10165 -
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 10213 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 10289 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 10671 -
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 10691 -
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 10719 -
t p.

Ab 10749 -
t p.

Ab 10772 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 10789 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 10897 -
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 10958 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 11127 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 11287 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 11303 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 11367 -
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 11865 -
t p.

Ab 11873 -
t p.

Ab 11908 -
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 11983 -
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 12012 -
e 2 v 9.94
v 1 f 10.13 10.04 10 09

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1910phae.proj.1029M

March 6, 1913

R X Cassiop. (cont.)

Ab12040
e 1 v 9.84
v 1 f 9.98 14 15 10.13

Ab12124
e 1 v 9.84
v 1 f 9.98 14 15 10.13

Ab12303
f 1 v 10.33
v 1 g 10.38 05 04 10.42

Ab12657
e 2 v 9.94
v 1 f 10.04 10 09 10.13

Ab12682
e 1 v 9.84
v 2 f 9.94 10 09 10.03

Ab12745
e 2 v 9.04
v 1 d 9.12 08 08 9.20

Ab12822
e 1 v 9.84
v 1 f 9.98 14 15 10.13

Ab13328
e 1 v 9.84
v 2 f 9.94 10 09 10.03

Ab13355
e 2 v 9.94
v 1 f 10.04 10 09 10.13

Ab13375
e 1 v 9.84
v 1 f 9.98 14 15 10.13

Ab13421
e 1 v 9.84
v 1 f 9.98 14 15 10.13

Ab13445
e 1 v 9.84
v 1 f 9.98 14 15 10.13

Ab13453
t p.

Ab13528
trailed

Ab13559
e 1 v 9.84
v 2 f 9.94 10 09 10.03

Ab13612
d 1 v 9.40
v 0 e 9.74 9.70 30 04 23
v 3 f 9.93

Ab13649
d 1 v 9.40
v 1 e 9.52 12 12 9.64

Ab13669
d 1 v 9.40
v 1 e 9.52 12 12 9.64
fogged

Ab13706
e 1 v 9.84
v 2 f 9.94 10 09 10.03

Ab13744
e 2 v 9.94
v 1 f 10.04 10 09 10.13

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1910phae.proj.1029M

March 6, 1913

R X Cassiop. cont.

Ab 13751 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 76 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 2046 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 2095 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 2143 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 2175 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 2187 v
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ab 2244 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 2272 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 2327 v
e 3 v 10.04
v 0 f 10.23 10.23 19 19
v 1 g 10.42

Ab 2371 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 2718 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 2742 v
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ab 2810 v
c 3 v 9.14 7 03
v 1 d 9.28 9.18 08 03

Ab 2877 v
d 1 v 9.40
v 1 e 9.64 9.52 12 12

Ab 3007 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15 near edge

Ab 3014 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 3070 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 1155 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 1197 v
t p.

Ab 1968 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

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1910phae.proj.1029M

March 6, 1913

RX Cassiop (cont.)

Ab 1703 ✓
tp.

Ab 1751 ✓
tp.

Ab 1914 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 810 ✓
e 1 v 9.84
v 1 f 10,13 9.98 14 15

Ab 958 ✓
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ab 1055 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 116 ✓
e 2 v 9.94
v 2 f 10.03 9.98 04 05

Ab 4062 ✓
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 4102 ✓
f 1 v 10,33
v 1 g 10.42 10.38 05 04

Ab 4129 ✓
f 1 v 10.33
v 1 g 1042 10.38 05 04

Ab 4261 ✓
h 1 v 1096
v 1 k 11.11 11.04 08 07

Ab 4275 ✓
e 2 v 9.94
v 1 f 10.13 10,04 10 09

Ab 4316 ✓
e 2 v 9.94
v 1 f 10,13 10,04 10 09

Ab 4345 ✓
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 4433 ✓
e 2 v 9.94
v 1 f 10,13 10.04 10 09

Ab 4003 ✓
f 1 v 10.33
v 1 g 10.42 1038 05 04

Ab 4023 ✓
e 1 v 9.84
v 2 f 10,03 9.94 10 09

Ab 3080 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 3083 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 3088 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 3107 ✓
e 1 v 9.84
v 2 f 10,03 9.94 10 09

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1910phae.proj.1029M

March 6, 1913

RX Cassiop. (cont.)

Ab 3145 ✓
g 1 v 10.62 1069 07 07
v 1 h 10.76

Ab 3147 ✓
t p

Ab 3148 ✓
d 1 v 9.40
v 1 e 9.64 9.52 12 12

Ab 3157 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 3210 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 3241 ✓
e 1 v 9.84
v 3 f 10.13 9.98 14 15

Ab 3336 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 3396 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 3820 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 3891 ✓
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ab 3953 ✓
t p

Ab 3982 ✓
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ab 8872 ✓
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ab 8800 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 8942 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 4465 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 4477 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 4806 ✓
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ab 5040 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ab 5119 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ab 5169 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

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1910phae.proj.1029M

March 6, 1913

R X Cassiop. (cont.)

ab5175 ✓
e 1 v 9.84
v 1 f 10,13 9.98 14 15

ab5707 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab13292 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

ab5238 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab5738 ✓
g 1 v 10.62
v 1 h 10.76 10.69 07 07

ab13329 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

ab5286 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab5812 ✓
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab13394 ✓
e 1 v 9.84
v 2 f 10.13 9.98 14 15

ab5354 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab5906 ✓
e 1 v 9.84
v 1 f 10.13 9.98 14 15

ab13458 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab5437 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab5934 ✓
f 1 v 10.33
v 2 g 10.42 10.38 05 04

ab13580 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab5497 ✓
e 1 v 9,84
v 2 f 10.03 9.94 10 09

ab6000 ✓
e 2 v 9.84
v 2 f 10,03 9.94 10 09

ab13645 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab5544 ✓
e 1 v 9.84
v 2 f 10,03 9.94 10 09

ab13261 ✓
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab13700 ✓
e 2 v 9.94
v 1 f 10.13 10.04 10 09

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1910phae.proj.1029M

March 6, 1913

R X Cassiop. cont.

ab 13710 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

ab 6869 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab 7140 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab 6569 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 6875 v
e 2 v 9.94
v 1 f 10.13 10.04 10 09

ab 7156 v
t p

ab 7173 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 6623 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

ab 6886 v
t p

ab 6962 v
e 2 v 9.04
v 1 d 9.20 9.12 08 08

ab 7180 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 6739 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 7030 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 7241 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 6830 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 7031 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 7244 v
e 1 v 9.84
v 1 f 10.13 9.98 14 15

ab 6850 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

ab 7115 v
e 2 v 9.04
v 1 d 9.20 9.12 08 08

ab 7258 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09
fair.
foggy.

ab 6856 v
e 1 v 9.84
v 2 f 10.03 9.94 10 09

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March 6, 1913

R X Cassiop. (cont)

Ac7316
e 1 v 9.84
v 1 f 10.13 9.98 14 15

Ac7355
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ac7398
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ac7422
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ac7677
t p

Ac7772
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ac7777
e 1 v 9.84
v 2 f 10.03 9.94 10 09

Ac7827
f 1 v 10.33
v 1 g 10.42 1038 05 04

Ac7846
f 1 v 10.38
v 1 g 10.42 10.38 05 04

Ac7858
e 1 v 9.84
f 1 g 10.13 9.98 14 15

Ac7887
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ac7891
f 1 v 10.33
v 1 g 10.42 1038 05 04

Ac7942
does not cover region

Ac7943
f 1 v 10.33
v 1 g 10.42 10 38 05 04

Ac7984
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ac8090
e 1 v 9.84
v 2 f 10.03 4.94 10 09

Ac8100
e 2 v 9.94
v 1 f 10.13 10.04 10 09

Ac8689
g 1 v 10.62
v 1 h 10.76 10.69 07 07

Ac8709
e 2 v 9.04
v 1 d 9.20 9.12 08 08

Ac8761
f 1 v 10.33
v 1 g 10.42 10.38 05 04

Ac8785
e 2 v 9.94
v 1 f 10.13 10.04 10 09

copied in ledger for Russell
March 22, 1913

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1910phae.proj.1029M

April 21, 1913

CPD - 58° 2099 10^h 15 33.5 − 58° 47.4 mag. 8.0

Error in Magn:
The following AM Plates examined show no variation and that this star is certainly a magn. or more <8.0.

AM			
316	1834	3467	
383	1841	4051	
469	1845	4126	
719	1921	4209	
722	1933	4219	
734	1948	4670	
736	2296	4737	
780	2372		
790	2439	Have also examined early	
1116	2476	B plates taken before 1905	
1156	2561	B 10752	
1157	2585	9420	
1243	2708	9291	
1247	2753	5251	
1560	2792	5001	
1700	3169	3559	
1714	3194	12400	
1787	3282	10658	
1793	3313	11149	
1803	3363		

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1910phae.proj.1029M

March 7, 1913

H Lyncis 06 31 59

for Bauer ft. c.s magn. 12.6 variable? Following I plates examined
Marked on I 19602 with c.s. a + b.

I 19602 v
a 1 v
v 3 b

I 30900 v
a 2 v
v 3 b pon.

I 9969 v
a 1 v
v 3 b

I 3111 v
a 1 v
v 3 b

I 5579 v
a 1 v
v 3 b

I 7614 t p
v 2 a ?

I 8477 v
a 1 v
v 3 b

I 8478 t p

I 12512 v
a 1 v
v 3 b

I 16556 v
a 1 v
v 3 b

I 16665 v
a 1 v
v 3 b

I 17623 v
a 1 v
v 3 b

I 19513 v
a 1 v
v 3 b

I 23573
a 1 v
v 3 b

I 24736 v
a 1 v
v 3 b

I 24972 v
a 1 v
v 3 b

I 28398 v
a 1 v
v 3 b

I 665 v
a 1 v
v 3 b

I 16681 v
a 1 v
v 3 b

I 16790 v
a 1 v
v 3 b

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1910phae.proj.1029M

March 7, 1913

ℓ Lyncis (cont)

I 19776 v
a 1 v
v 3 b

I 21839 v
a 1 v
v 3 b

I 21906 v
a 1 v
v 3 b

I 24470 v
a 1 v
v 3 b

I 24833 v
a 1 v
v 3 b

I 34319 v
a 1 v
v 3 b

I 17009 v
a 1 v
v 3 b

I 17216 v
a 1 v
v 3 b

I 16117 v
a 1 v
v 3 b

I 7613 v
v = a ?
for plate.

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1910phae.proj.1029M

March 18, 1913

Missing Stars in Vatican Zone +64°

DM +63° 241° 1h 38m 56° +63° 12' 47" (1875) magn. 9.3
does not exist on the plates taken Dec. 26, 1901.
although it is on another plate of zone +63°. Hence it
might be an Algol-star. (Copied from Hagen's letter)
Marked in I 23657 and checked by A D Walker March 18, 1913
R.S. "a" + "b"

The following (27) I Plates have been examined and show no evidence of variation.

I	18721	13	
	18462	12	
	18261	10	
	17822	9	
	18359	11	
	17038	8	
	16734	7	
	16551	6	
	16203	5	
	15968	4	
	15897	3	
	15481	2	
	15334	1	
	4544	Oct. 16, 1891	
	26391	21	
	20571	20	
	20345	19	
	20343	18	

I	20128	17
	19840	16
	19669	15
	19216	14
	34498	Feb. 7, 1907
	30017	24
	29859	23
	28108	22

Always .5 fainter than DM +62° 307 1h 37.9m +62.8
magn. 9.5
and 1' brighter than star n 30' and preceding 10s
DM +63° 238 1h 37.3m +63.1 magn. 6.1
~~Brighter~~ star = a and ~~following~~ fainter = b Marked
on I 28108.

March 22, 1913.

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1910phae.proj.1029M

March 18, 1913

Missing Stars in Vatican Zone +64 (cont.)

	$15^h\ 50^m.14$	$+64°$	$6'\ 48''$ (1875)	9.1 m.
	15 49.8	+ 64	10.4 (1855)	
[+64° 1096]	15 49.8	+ 64	9.7 (1855)	Very near approx. pos. but letter of Hagens says it is not in D.M.

I 29097	Aug 12, 1902	12
I 1143	May 11, 1890	1
I 27870	Oct. 28, 1901	11a
2087	Oct. 28, 1890	3
23335	Aug. 15, 1899	10
19416	Nov. 3, 1897	8
20372	Mar. 5, 1898	9
15611	Aug. 7, 1896	7
32925	Mar. 22 1905	14
29364	Oct. 10, 1902	13
27780	Oct. 15 1901	11
11683	Oct. 17, 1894	6
1900	Sept. 29/1900	2
9216	Aug 14, 1893	5
3441	Apr. 21, 1891	4

Exceedingly faint star on I 29097. March 22, 1913

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1910phae.proj.1029M

Saturday, March 22, 1913

R. X Cassiopeiae

For determining grades between comparison stars for this variable.

I 24569			I 28116	I 21533	T
a	2	b	a 2 b	a 2 b	
b	2	c	b 2 c	b 1 c	
c	1	d	c 2 d	c 2 d	
d	2	e	d 2 e	d 2 ~~e~~	
e	2		e 2 f	~~e~~ 2 f	
f	2		f 1 g	f 1 g	
g	1		g 1 h	g 1 h	
h	2		h 1 k	h 1 k	
k	1		k 1 l	k 1 l	
l	1				

Please reject. Not in the best of order.
See next page.

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1910phae.proj.1029M

Saturday March 22 1913.

R X Cassiopeiae

For determining grades between comparison stars for R X.

I 24569	I 28115	I 21533	I 11620
a 2 b	a 2 b	a 2 b	a 2 b
b & c	b 2 c	b 1 c	b 1 c
c 2 d	c 2 d	c 2 d	c 2 d
d 2 e	d 2 e	d 2 e	d 2 e
e 2 f	e 2 f	e 2 f	e 2 f
f 1 g	f 1 g	f 1 g	f 1 g
g 2 h	g 1 h	g 1 h	g 1 h
h 1 k	h 1 k	h 1 k	h 1 k
k 1 l	k 1 l	k 1 l	k 1 l

March 22, 1913

									Adopted Photog. Mag.
Mean.	a 2 b	Res.	oo	oo	oo	oo	2.0	a	0.0	8.46	8.46
	b 1 c		oo	01	oo	oo	1.2	b	2.0	8.92	8.88
	c 2 d		oo	oo	oo	oo	2.0	c	3.2	8.74	8.84
	d 2 e		oo	oo	oo	oo	2.0	d	5.2		9.30
	e 2 f		oo	oo	oo	oo	2.0	e	5.2	7.2	9.74
	f 1 g		oo	oo	oo	oo	1.0	f	5.2	9.2	10.23
	g 1 h		01	oo	oo	oo	1.2	g	6.2	10.2	10.52
	h 1 k		oo	oo	oo	oo	1.0	h	7.5	11.4	10.86
	k 1 l		oo	oo	oo	oo	1.0	K	8.5	12.4	11.21
								l	9.5	13.4	11.65

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1910phae.proj.1029M

Saturday, April 5, 1913

R Canum Venaticorum

For determining variation in c.s. f in answer to Olcott's letter of March 30, 1913.
Marked on I 25377. Ident. transferred to AC 10364
Direct estimates.

Ab 10364 March 26'09
7.9? n.E image elong.

Ab 10375 March 29, '09
7.4 n.E.

Ab 10413 April 9 '09
7.4 n.E

Ab 10467 April 28'09
7.5 n.E.

Ab 10479 May 4, 1909
7.4 fogged.

Ab 10567 June 16 '09
7.1? n.E.
c.s (7.1) defective.

Ab 10604 June 30'09
7.4 slightly fogged. n.E

Ab 10630 July 12, 1909
7.6 n.E.

Ab 10655 July 24, 1909
7.4 n.E

Ab 11106 Nov. 30 '09
7.4 slightly fogged. n.E.

Ab 11281 Jan. 10, 1910
7.5 n.E

Ab 11307 Jan. 15'10
7.5 n.E.

Ab 11404 Feb. 21 '10
7.5 n.E. fogged.

Ab 11437 March 4'10
7.0
~~6.9~~ n.E. image elongated

Ab 11466 March 11, '10
7.2? n.E image elongated

Ab 11507 March 19, '10
7.5 n.E.

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1910phae.proj.1029M

Saturday April 5, 1913

R Canum Venaticorum cont.

Ab 11516 March 2, '10
7.5 m.E.

Ab 11555 April 2, '10
7.5 m.E.

Ab 11566 April 5 '10
7.4 m.E.

Ab 11591 April 16 '10
7.6 m.E.

Ab 11644 May 7, 1910
7.6 m.E.

Ab 11650 May 11 '10
7.6 m.E.

Ab 11825 Aug. 2 '10
7.6 m.E.

Ab 12143 Nov. 19, '10
7.5

Ab 13043 March 30 '12
7.5

Ab 13520 Nov. 28 '12
7.2: Df. mar. c.s "f"

Ab 10308 March 14, '09
7.5

Ab 10367 March 28 '09
7.5

~~Ab 10~~
Ab 10384 March 31 '09
7.4

On AC 10384 examined by A.J.C. shows c.s. "f" <.5 ~~7.1~~ 7.1 >1.0 8.6. April 5, 1913.

Ab 241 March 12, 1899
7.6

Ab 183 Jan. 27, 1899
7.5 fogged.

Ab 796 April 5, 1900
7.5

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1910phae.proj.1029M

cont. from page 54

Entered on card

Friday 10
~~Thursday~~, May 9 1913

Var. examined in reg. of ζ Carinae for Robets
The following B plates. Comp. stars for ζ Carinae used,
Marked on B29009 Orig. reg. on B19066 Broken and much marked.
Var. S.F of close dble. Faintest c.s. 12.8

B29009
12.4

B 8982
<12.3
12.6 n.s.

B10658
<12.3.
12.6. n.s.

B11171
11.8

B13520
12.0

B15930
12.7

B16102
12.5

B16213
about eq. to 12.3
defective in reg of var.
uncertain.

B16472
12.4

B16633
12.3

B16766
12.3

B16865
12.3

B16930
12.5

B19260
barely vis.
fully a magn <12.6

B19262
same as B19260

B19468
about. 14.0

B19469
about 14.0

B19667
n.s <12.6

B21118
uncertain

B21327
<p+q.

B21359
<p.+q.

B21426
<p.=r.? ident.

B22414
11.5

B22779
12.0

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1910phae.proj.1029M

Friday, May 9, 1913

Estimates of Var. of Roberts near Z Car. sent.

B26842
n.s. / 12.8

B26856
14.0?
very ft.

B26939
14.0?

B26972
13.5

B26991
13.0

B27019
too poor in reg.

B27089
13.0?

B28802
12.0

B29196
too poor in reg.

B31212
11.6

B31285
11.6

B31347
12.0

B41279 May 17, 1910
12.6?

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1910phae.proj.1029M

Entered on card.

Tuesday, May 27, 1913.

Suspected Var. +32°1437 for Wm. Tyler Olcott.
Sq. marked m. I 22479 also a b 5540. Identifications checked by A.D.W.

ab122	ab2328	ab3984
b 2 v	b 2 v	b 3 v
v 1 c	v 1 c	v 1 c
ab663	ab3292	ab4820
b 3 v	b 2 v	b 2 v
v 1 c	v 1 c	v 1 c
ab720	ab3456	ab5340
b 2 v	b 2 v	b 2 v
v 1 c	v 1 c	v 1 c
ab1259	ab3458	ab5776
b 2 v	b 2 v	b 3 v
v 1 c	v 1 c	v 1 c
ab1337	ab3469	ab5833
b 2 v	b 2 v	b 2 v
v 1 c	v 1 c	v 1 c
ab1846	ab3478	ab5883
b 2 v	b 3 v	c 1 v
v 1 c	v 1 c	v 3 d
ab2047	ab3496	ab5907
b 3 v	b 2 v	c 1 v
v 1 c	v 1 c	v 3 d

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1910phae.proj.1029M

Tuesday, May 27, 1913

Ab 6174	Ab 8882	Ab 10822
c 1 v	c 1 v	b 2 v
v 3 d	v 3 d	v 2 c
Ab 6901	Ab 220	Ab 1320
c 1 v	c 1 v	b 2 v
v 3 d	v 3 d	v 2 c
Ab 7405	Ab 254	Ab 1346
c 1 v	c 1 v	c 1 v
v 3 d	v 3 d	v 3 d
Ab 7913	Ab 443	Ab 1801
c 1 v	c 1 v	c 1 v
v 3 d	v 3 d	v 3 d
Ab 7998	Ab 518	
c 1 v	c 1 v	
v 3 d	v 3 d	
Ab 8018	Ab 761	
c 1 v	c 1 v	
v 3 d	v 3 d	
Ab 8237	Ab 1008	
c 1 v	c 1 v	
v 3 d	v 3 d	

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1910phae.proj.1029M

July 31, 1913 Thursday

Objects of interest examined for Mr. King.

Star. ~~Hagen~~ 8.0 +62 1254 Phot. magn. 8.48 H.A. 57

" 8.2 +62 1252 " " 8.48 " "

Marked on AC 3351

Han examined 27 AC Plates from May 11 '1899 to April 5, 1910. There is a slight variation of .4 or .5 in +62 1254 but as surrounding stars seem to vary it may be due to photographic changes. Miss Wells has examined these plates also.

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1910phae.proj.1029M

August 2, 1913 Saturday.

CDM - 30° 5426

While identifying B 40080 found the above star in CDM 10th magn. 8.3 .9+ appears my ft. on plate with spectrum Mc? Have examined B 15227, B 26676, B 26900 B 20602, B 24549 and B 24959 also all the best AM plates 8^h-30° and found no variation. This star is not in third type cat.

B 15599 confirms class of spectrum Plate is in C stack in Miss Cannon's room.

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1910phae.proj.1029M

Saturday August 9, 1913

Measures of AC 13931

Pole L'

Scale W

	1st	2nd	2nd	Atm-Scale Reading	Curve	Magn.	AC - Ptm. White	Red		
5 = 1		7.2	7.2	-0.72	-0.74	6.46	02			
+88°2 = 2		8.8	8.8		-0.44	8.36		26	07	16
+88°115 = 3		9.0	9.2	-0.32	-0.14	9.06	18			
4r = 4		8.8	8.8		-0.44	8.36		15	04	05
2r = 5		7.6	7.6		-0.70	6.90		35	16	25
+88°105 = 6		8.8	8.8		-0.44	8.36		16	03	06
+88°90 = 7		9.4	9.4		.	.		.		
+88°86 = 8			9.0	-0.22	-0.32	8.68	10			
+88°80 = 9			9.2	-0.28	-0.14	9.06	14			
3r = 10			8.2		-0.62	7.58		06	25	16
5r = 11			9.0		-0.32	8.68		01	18	09
7 = 12			8.0	-0.61	-0.65	7.35	04			
6 = 13			7.8	-0.72	-0.67	7.13	05			
1r = 14			6.8		-0.78	6.02		76	57	.
9 = 15	9.8		8.8	-0.19	-0.44	8.36	25			
+87°15 = 16	9.5		8.5	-0.66	-0.55	7.95	11			
+87°12 = 17	9.0		8.6		-0.57	8.09		09	28	19

+48
-41
8)+07
+01

+169
-15
8)+154
+.19

+93
-15
8)+78
+.10

+52
-44
8)76
±12

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1910phae.proj.1029M

Wednesday, August 13, 1913.

Measure of α Cr 14193

Pole L'

Scale W

		2nd	2nd		Ptm - Scale Reading	Curve	Magn.	AC - White	Ptm. Red	
	1 r	6.9	6.9	6.90 00						
16	6	8.1	8.0	8.05 10	-0.97	-1.02	7.03	05		
	7	8.6	8.3	8.45 21	-1.06	-0.98	7.47	08		
05	5 r	9.2	9.1	9.15 01		-0.80	8.35		32	-65
25	3 r	8.7	8.6	8.65 10		-0.93	7.72		208	35
06	9	9.3	9.3	9.30 00	-0.69	-0.76	8.54	07		
	+87 15	8.7	8.7	8.70 00	-0.86	-0.92	7.78	06		
	+87 12	8.8	8.8	8.80 00		-0.90	7.90		28	01
	5	7.5	7.6	7.55 10	-1.07	-1.06	6.49	01		
16	+88 105	8.8	8.9	8.85 01		-0.89	7.96		24	03
09	2 r	7.8	7.7	7.75 01		-1.05	6.70		15	42
	+88°115	9.4	9.6	9.50 21	-0.62	-0.70	8.80	08		
	4 r	8.9	8.8	8.85 10		-0.89	7.96		25	02
	+88°12	8.7	8.7	8.70 00		-0.92	7.78		32	05
	+88°90	8.9	8.8	8.85 10		-0.89	7.96		101	74
	+88°86	9.4	9.4	9.40 00	-0.62	-0.74	8.66	12		
19	+88°80	9.7	9.8	9.75 10	-0.83	-0.64	8.11	19		

+28 −38 8)−10 −01

+123 −242 8)−219 −15 −27

82 −85 8)167 +21

52
44
96
12

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1910phae.proj.1029M

Thursday October 8 1913

Observations of suspected variable A J 6 in reg. 12h 0
Ref. Ble 25 p. 91. [No 3] DM +0° 2900 12h 11.1m +0 19.7 9.3
Found on A 6 11435, D from A 6 11314 Marked on I 24575

Examined following I plates: Show variation.

I 26418

May 22, 1897 I 18131 fr
April 30, " I 18034 "
April 22, 1893 I 8436 "
Feb. 20, 1899 I 22363 " (good)
Dec. 30, 1889 I 409
Mar. 10, 1900 I 24747 br. (good)
Apr. 24, 1897 I 18009 br.
May 7, 1896 I 15079 br.
Dec. 26, 1889 I 389 br.
Apr. 26, 1891 I 3484 br.

I 22363 + I 24747 alone show variation
Variation conf. on these two plates by A. J. C. to about 0.8 magn.

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1910phae.proj.1029M

Thursday, October 8, 1913

lemt. obs. of var. susp. by A.J.C. in reg. 12h 0.
Ref. Bk. 25, p. 134. Approx. 1855.11 26.5 +0.46
Marked on I 24727 [No. 5]

Following plates examined show variation.

Dec. 29, 1898 I 22095 br. good.
Apr. 29, 1897 I 18025 br.
Apr. 19, 1897 I 17917 br.
Apr. 9, 1908 I 35262 ft.
Mar. 7, 1900 I 24703 ft.
May 10, 1895 I 12868 ft
Jan. 25, 1894 I 10576 ft.

Brightest on 22095; Var. = 0.9 or perhaps 1 mag.

See also Rh 3, 142

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1910phae.proj.1029M

Thursday, Octbr 5, 1913

Cent. obs. of var. susp. by A J C. in rg. $12^h\ 0^\circ$

Ref. Bk. 25, p. 134 Appx. 1855 $11^h\ 31.0$ $+11\ 21$

Marked on I 24344 [No. 6]

Following plates examined show variation

Apr. 3, 1900	I 25016 br. grad.
Mar. 26, 1892	I 5955 br.
Dec. 29, 1898	I 22094 —
Apr. 23, 1893	I 8445 —
Feb. 11, 1905	I 32647 ft grad.
Mar. 31 1898	I 20564 ft.
Apr. 29, 1897	I 18026 ft.
Apr. 19, 1897	I 17918 ft
June 1, 1896	I 15214 ft grad.
Feb. 16, 1892	I 5696 ft.

Comparison of I 25016 and I 15214 shows a variation of about 0.7 mags.

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1910phae.proj.1029M

Monday, October 20, 1913.

Count. ob. of var. susp. by A J C. in neg. 12h 0

Marked on I 32648

Following plate examined show variation

Dec. 30, 1889 I 409 br.
Apr. 1, 1898 I 20583
Feb. 11, 1905 I 32648 br, grad.
Feb. 6, 1900 I 24575 br ~~grad~~
Dec. 26, 1889 I 389 ft.
Apr. 30, 1892 I 6198 ft,
May 13, 1896 B 15844 ft ~~grad~~

abnt. 0.8 range. mayb 0.7

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1910phae.proj.1029M

Thursday February 5, 1914

Pec. sp. marked on MC 4413. Identified as +14° 1598. In Vol. 56, Class N. an identified star at +14° 1594 was assumed to be same? Error?

Following I Plates show variation of former star.

7 4 34.6 +14 50.3 19.17 Marked on I 14866

I 14866 br.
I 29475 n.s.
I 22098 ft.
I 21722 n.s.
I 17463 br.

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1910phae.proj.1029M

July 24, 1914. Friday.

(1900)

Susp. Var. near S Sagittarii 19 12 53 -19 14
disc. by L. Campbell. Marked on B 13591
The following B plates show variation.

B13591 br.	B20288 ft
4028 br.	18969 ft.
39181 br	19148 ft.
29583 br.	25396 ft.
	41657 ft.

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1910phae.proj.1029M

Entered on card

Saturday September 12, 1914

Var. mar T T Cygni suspected by H. Baldwin in letter dated Aug. 31, 1914
DM +33° 3516 Marked on AC 15391 15391 C.S. a, b+c marked on same.

AC 15391 Aug. 23, 1914
a 2 v
v 2 b

AC 6685 Sept. 13, 1905
b 1 v
v 3 c

AC 10895 Oct. 8, 1909
b 1 v
v 3 c

AC 2924 Oct. 22, 1902
a 3 v
v 1 b

AC 6294 Apr. 17, 1905
b 1 v
v 3 c

AC 10843 Sept. 29, 1909
a 3 v
v 1 b

AC 4739 Mar. 12, 1904
a 2 v
v 2 b

AC 5330 Oct. 4, 1904
a 2 v
v 2 b

AC 9798 Oct. 7, 1908
a 3 v
v 1 b

AC 2866 Oct. 7, 1902
a 3 v
v 1 b

AC 5303 Sept. 30, 1904
a 3 v
v 1 b

AC 8623 July 19, 1907
b 1 v
v 3 c

AC 2772 Aug. 23, 1902
a 3 v
v 1 b

AC 11686 May 29, 1910
a 3 v
v 1 b

AC 2572 May 21, 1902
a 2 v
v 2 b

AC 7733 Aug. 19, 1906
a 3 v
v 1 b

AC 11016 Nov. 6, 1909
b 1 v
v 3 c

AC 2635 June 19, 1902
a 3 v
v 1 b

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Entered on card

Friday, October 2, 1914

Object of interest found by Friedrich C. Leonard.

Sept. 29, 1914. Variable suspected +32° 1437
6h 45.5m +32° 40′ 8.0 mag. (1855)

Marked + identified on AC 5907.

C.S. a	+32°	1434	6	44.8	+32 29 8.6
C.S b	+32°	1424	6	43.0	+32 58 8.8
C.S c	+33°	1438	6	48.5	+33 3 9.0
C.S d	+32°	1450	6	49.0	+32 46 9.0

AC 5907 Jan. 28, '05	AC 3292 Feb. 13 '03	AC 5340 Oct. 6 '04
b / v	c / v	c / v
v / c	v 2 d	v 2 d
AC 122 Dec. 15 '98	AC 3456 Mar. 29 '03	AC 5776 Dec. 28 '04
b / v	c / v	b / v
v / c	v 2 d	v / c
AC 663 Jan. 6 '00	AC 3469 Apr. 1, '03	AC 6901 Oct. 27 '05
b / v	c / v	b / v
v / c	v 2 d	v / c
AC 1337 March 14 '01	AC 3984 Sept 29 '03	AC 7405 Mar 23 '06
b / v	b / v	c / v
v / c	v / c	v 2 d
AC 1846 Oct. 7, '01	AC 4820 Apr. 12 1904	AC 7998 Nov. 8, '06
b / v	b / v	c / v
v / c	v / c	v 2 d

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1910phae.proj.1029M

Var. cont.

AC 12305 Jan. 23 '11
c 1 v
v 2 d

AC 12986 Nov. 10 '12
b 1 v
v 1 c

AC 13535 Dec. 1, '12
b 1 v
v 1 c

AC 13619 Jan 8, 1913
b 1 v
v 1 c.

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1910phae.proj.1029M

Entered on card

Wednesday, October 14, 1914

Marker on AC 4820 & 2607

A Postal from Enebo dated Sept. 28, 1914.
fps. 1900 6 34 9 +31 16.9. Var. n.s. only
on dates Dec. 24, 1906, magn. 9.4, + April 18, 1904, 9.5
during years 1902 - 1914. DM +31° 1380 magn. 9.2
The following plates show no star in said position.

The ~~no dates~~ plates anywhere ^may the above dates are AC plates.
as follows,

AC 4820	April 12, 1904	AC 8153	Jan. 11, 1907
AC 4732	March 12, 1904		
AC 4879	May 4, 1904		
AC 8105	Dec. 17, 1906		
AC 8110	Dec. 18, 1906		
AC 4829	April 13, 1904		
AC 4865	April 30, 1904		
AC 8145	Jan. 9, 1907		

The following AC Plates do not show this star: —

AC 12880	Feb. 5, 1912	AC 12344	Feb. 23, 1911
12929	Feb. 16, 1912	AC 12695	Oct. 29, 1911
5197	Aug. 28, 1904	AC 12737	Nov. 15, 1911
12986	March 10, 1912	AC 12813	Dec. 25, 1911
5540	Nov. 16, 1904	AC 12868	Jan. 27, 1912
5340	Oct. 6, 1904	AC 12989	March 11, 1912
12312	Jan. 24, 1911	AC 12991	March 13, 1912
12325	Feb. 15, 1911	AC 12992	March 13, 1912
12328	Feb. 16, 1911	AC 12993	March 13, 1912
12333	Feb. 18, 1911	AC 12998	March 14, 1912

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1910phae.proj.1029M

October 14, 1914

Var. susp. cent.

AC	13000	March		
AC	82	Oct. 27 '98	2247	Jan 25 '02
	122	Dec. 15 '98	2258	Jan 30 '02
	~~16~~ 220	Feb. 23 '99	2283	Feb 6, 02
	254	Mar. 21 '99	2328	Feb. 14 '02
	443	Sept. 15 '99	2361	Feb. 23 '02
	507	Nov. 7 '99	2375	Mar. 2 '02
	518	Nov. 12 '99	2404	Mar. 12, 02
	605	Dec. 16 '99	2943	Oct. 28 '02
	644	Jan 2 '00	2981	Nov. 7 '02
	663	Jan 6 '00	3219	Jan. 26 '03
	720	Feb. 8 '00	3230	Jan. 31 '03
	761	Mar 14 '00	3283	Feb. 12 '03
	1008	Sept 19 '00	3292	Feb. 13, 03
	1082	Dec 22 '00	3370	Feb. 28 '03
	~~12~~ 1320	Mar. 6 '01	3450	Mar 25 '03
	1337	Mar 14 '01	3456	Mar. 29 '03
	1346	Mar. 17 '01	~~3457~~	~~" " "~~
	1424	Apr. 28 '01	3458	" " "
	1427	Apr. 29 '01	3462	" 31 '03
	1432	May 3 '01	3469	Apr. 1, 03
	1801	Sept. 27 '01	3478	" 5, 03
	1846	Oct 7 '01	3485	" 10 '03
	1908	Oct 25 '01	3489	" 11 '03
	1987	Nov. 20 '01	3496	" 12 '03
	2004	Nov. 22 '01	3505	" 17 '03
	2114	Dec. 27 '01	3512	" 18 '03
	2157	Jan. 3 '02	3520	" 19 '03

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1910phae.proj.1029M

AC	3541	Apr. 21 '03	Ac	6647	Aug 31,05
	3934	Sept. 24, 03		6679	Sept 9,05
	4141	Oct. 30, 03		6689	" 13,05
	4190	Nov. 9, 03		6720	" 23,05
	4358	Dec. 13, 03		6810	Oct 10,05
	4488	Jan. 4, 04		6832	" 12,05
	4565	" 25 '04		6901	" 27,05
	4622	Feb. 28 '04		6973	Nov. 10,05
	4720	Mar. 9 '04		7101	Dec. 10,05
	5250	Sept. 15 '04		7246	Feb. 2,06
	5316	Oct. 1 '04		7270	" 10,06
	5412	Oct 24 '04		7301	" 19,06
	5499	Nov. 8 '04		7460	Apr. 8,06
	5573	Nov. 21 '04		7528	May 3,06
	5678	Dec. 6 '04		7913	Oct. 12,06
	5751	" 19,04		7952	Nov. 2,06
	5771	" 24, '04		7998	" 8,06
	5776	" 28 '04		8058	" 26,06
	5833	Jan. 14 '05		8018	" 14,06
	5883	" 23 '05		8237	Feb. 11,07
	5907	" 28,05		8290	" 23,07
	5946	Feb 4,05		8299	" 25,07
	5982	" 11,05		8310	" 27,07
	6027	" 18,05		8342	Mar. 11,07
	6143	Mar 10,05		8354	" 18,07
	6174	" 15,05		8882	Oct. 16,07
	6283	Apr. 9,05		8913	" 22,07
	6305	" 22,05		9056	Dec. 8,07

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1910phae.proj.1029M

Ac	9166	Jan. 10, 08
	9191	" 20, 08
	9223	" 31, 08
	9254	Feb. 8, 08
	9308	Mar. 3, 08
	9372	" 30, 08
	9418	Apr. 16, 08
	9455	May 1, 08
	9861	Oct. 30, 08
	10060	Dec. 15, 08
	10082	" 21, 08
	10084	" 21, 08
	10144	Jan. 2, 09
	10214	Feb. 6, 09
	10225	" 11, 09
	10253	" 22, 09
	10277	Mar. 5, 09
	10771	Aug. 28, 09
	10832	Sept. 18, 09
	11014	Nov. 5, 09
	11034	" 9, 09
	11119	Dec. 4, 09
	11288	Jan. 11, 10
	11443	Mar. 8, 10
	12030	Oct. 11, 10
	12053	" 17, 10
	12105	Nov. 8, 10
	12116	" 12, 10
	12151	" 25, 10
Ac	12184	Dec. 8, 1910
	12251	" 30, 10
	12305	Jan. 23, 1911.
	13000	Mar. 14' 12
	13001	March 14, 12
	13002	March 15, 12
	13003	March 16' 12
	13004	March 16' 12
	13008	March 17, 12
	13015	March 19, 12
	13031	March 27' 12
	13057	April 3, 12
	13067	Apr. 5' 12
	7330	Feb. 28' 06

I	30394	April 29' 03
	30383	" 28 '03
	30376	" 27 '03
	30578	May 26 '03
	31086	Oct. 28 '03
	30555	May 23' 03
	30544	May 22' 03
	30518	" 20, '03
	30486	" 15' 03
	30478	" 13' 03
	30477	" 12' 03

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1910phae.proj.1029M

I 30452 May 10·03
30451 May 10·03
30445 " 9·03
30444 " 9·03
30435 " 8·03
30243 March 28·03
27884 Oct. 29·01
26615 Feb. 8·01
24042 Nov. 13·99
24029 Nov. 12·99
22479 Feb. 25·99
21822 Nov. 28·98
20316 Mar. 3·98
20431 Mar. 9·98
17612 Mar. 16·97
16991 Jan. 6·97
13875 Nov. 27·95
12417 Feb. 22·95
12235 Jan. 22·95
10790 March 10·94
30475 May 12·03
31378 Jan. 14·04

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1910phae.proj.1029M

Monday, Sept. 13, 1915

Var. susp. by L. Campbell. in Reg. of S Sagittarii
near c.s. 9.5 magn. 19 13 19
Marked on B 39181 (19 10.1 - 19 19 approx. 1855)
The following plates examined show var.

B 39181 br. June 17, 1908
B 13591 br. June 4, 1895
B 23849 br. Aug. 15, 1899
B 19148 ft. May 21, 1897
B 25396 ft. May 22, 1900
B 22798 ft. May 9, 1899
B 20288 ft. Sept. 13, 1897

B 39181 var = star marked 12.9 (usual)
B 19148 var min. star 13.0 ~~still~~ seen clearly
+ star at least 0.5 fainter
B 20288 min.
~~Range of~~
Range 12 to < 13.5

Range 13.0 to < 14.0
magn. determined from Carte Reg. 19. - 16.5.

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1910phae.proj.1029M

Entered on card

Monday, Sept. 13, 1915

In reg. 161138 H. Cor. Br. a var. was susp. by ~~L~~ Ident. with DM chart. Returns c.s "K" + "L"

The foll. plates show no sign of said star.

	y.	m,	d.
MC 5386,	1914,	4,	17
MC 5485,	1914,	5,	1
AC 2816	1902,	9,	7
AC 11581	1910,	4,	13
AC 6368	1905,	5,	9
AC 16666	1915,	8,	17
AC 11586	1910,	4,	14
AC 16604	1915,	7,	23
AC 16557	1915,	7,	4

The foll. plates ~~sug~~. est. by A.J.C.

AC 1916	1901, 10, 28	m.s. < 10.5
AC 2787	1902, 8, 28	m.s < 10
AC 3724	1903, 6, 16	m.s < 10.5
AC 5106	1904, 7, 29	m.s < 10.5
AC 7389	1906, 3, 18	m.s < 10.5
AC 8326	1907, 3, 6	m.s < 10.5

AC Plates 16702, 16704 and 16712 taken on Sept. 8, 9, and 10th resp. were too poor to examine.

MC 5513 (yellow) 1914, 5, 6
MC 5627 (yellow) 1914, 6, 5
MC 5655 (yellow) 1914, 6, 12
} no trace of star on these plates.

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1910phae.proj.1029M

Friday, Oct. 8, 1915

Susp. Var. near S W Sagittarii 19 13 31 marked on chart by L Campbl. Same looked up on AM and B plates, and can find no var. Following is the list of plates examined.

AM 2275	Sept. 17, 1903	(marked plate.)			
B 17144	Aug. 14, 1896	(" ")			
B 30364	July 14, 1902				
B 23109	June 19, 1899				
B 22036	Oct. 13, 1898				
B 19975	Aug. 6, 1897				
B 19454	June 8, 1897	AM 3679	July 1, 1905		
AM 5002	July 15, 1907	AM 3497	May 2, 1905		
AM 4991	July 10, 1907	AM 3156	Oct. 28, 1904		
AM 4964	July 2, 1907	AM 2996	Sept. 1, 1904		
AM 4640	Oct. 15, 1906	AM 2941	Aug. 12, 1904		
AM 4465	Aug. 7, 1906	AM 2924	Aug. 5, 1904		
AM 4389	July 11, 1906	AM 2866	July 22, 1904		
AM 4373	July 9. 1906	AM 2782	June 23, 1904		
AM 3884	Sept. 16, 1905	AM 2750	June 15, 1904		
AM 3794	Aug. 17, 1905	AM 2381	Nov. 19, 1903		
AM 3728	July 22, 1905	AM 2290	Sept. 21, 1903		

~~AM 2807~~

On AM 2807 this reg., which was examined by E.F.L., star no. "30" is the same star as Campbl's. This may have been suspected by Miss Leland. It has not been announced in Cir. 152 which has the list of var. found in this reg.

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1910phae.proj.1029M

Friday, Oct. 8, 1915.

M. 11 ♂ 37340 Var. susp. by. a g l?
+25° 20' 0 Var. ~~+1~~ no. 1, 1915.

AC 14611 Dec. 3, 1913
AC 15728 Nov. 16, 1914
AC 15823 Dec. 10, 1914
AC 15895 Dec. 18, 1914
AC 16674 Aug. 18, 1915
AC 14484 Oct. 31, 1913
AC 16709 Sept. 9, 1915

no variation,

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1910phae.proj.1029M

Saturday, Oct. 9, 1915

Var. susp. by L. Campbell near R Normae

152849 Marked on chart of same.

The following AM plates examined show no variation Marked on B 13970 + AM 1324

3402	March 28, 1905	AM 3584	June 3, 1905
2607	May 4, 1904	AM 3523	May 11, 1905
4318	June 15, 1906	AM 3429	April 1, 1905
1212	April 28, 1902	AM 2905	Aug. 2, 1904
5004	July 16, 1907	AM 2845	July 20, 1904
4939	June 28, 1907	2815	July 6, 1904
4912	June 8, 1907	2737	June 11, 1904
4859	May 23, 1907	2687	June 1, 1904
4377	July 10, 1906	2633	May 7, 1904
4282	June 9, 1906	2548	April 16, 1904
4234	May 14, 1906	2073	June 27, 1903
4141	March 24, 1906	2059	June 22, 1903
4096	Feb. 2, 1906	1979	June 1, 1903
3774	Aug. 10, 1905	1826	Feb. 20, 1903
3702	July 10, 1905	1512	Aug. 21, 1902
1373	June 17, 1902	1388	June 25, 1902
1362	June 14, 1902	1332	June 11, 1902

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1910phae.proj.1029M

Saturday, Oct. 9, 1915

Var. susp. by L. Campbell near H Cent 122854

The following plates confirm var.

Approx. 1875 12 28.7 −53 53

marked on B 26917

B 31341 br. Feb. 19, 1903 61^{mm} upp.

31346 br. Feb. 20, 1903 62^{mm}

31387 ft. March 25, 1903 60^{mm}

37355 ft. May 8, 1907 22^{mm}

22991 n.s June 5, 1899 13^{mm}

29752 n.s May 17, 1902 10^{mm}

29102 br. Jan. 17, 1902 10^{mm}

26917 very br. Jan. 28, 1901 10^{mm}

25631 n.s. June 27, 1900 10^{mm}

24940 ft. April 4, 1900 63

Range approx. 12.5 (max.) to <14.3 (min.)

Seq. of H Cent. meas.

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1910phae.proj.1029M

Saturday, Oct. 9, 1915

Var. susp. by L. Campbl near 0728206
Z Puppis. On examining the following B plates I see no variation as this star does not now appear. Marked on B 14969.

B 26899 Jan. 12, 1901
26670 Nov. 19, 1900
24202 Sept. 25, 1899
22372 Dec. 17, 1898
18013 Nov. 24, 1896
12499 Nov. 10, 1894
35860 April 22, 1905
B 31537 April 25, 1903
I 32918 March 22, 1905
B 39840 Dec. 2, 1908
31149 Dec. 4, 1902
31144 Dec. 3, 1902
10917
25046 April 10, 1900
24521 Nov. 13, 1899
22423 April 4, 1899
18236 Dec. 28, 1896

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1910phae.proj.1029M

Entered on card

Saturday, December 4, 1915

Var. at $20^h\ 42^m\ 24^s$ $+15^\circ\ 14'\ 38''$ susp. by F. W. Reiss apart. The following AM plates have been examined. Marked on I 33474

C.S. {a = +15° 4276 20 +6.2 +16 19 9.4 mags.
{b = not in DM. 20 41.5 +14 51 ..

AM 2193	AM 3929	AM 4855
a 4 v	a 4 v	a 4 v
v 1 b	v 1 b	v 1 b
AM 2729	AM 4192	AM 4898
a 4 v	a 4 v	a 4 v
v 1 b	v 1 b	v 1 b
AM 2908	AM 4253	AM 4929
a 4 v	a 4 v	a 4 v
v 1 b	v 1 b	v 1 b
AM 3106	AM 4458	AM 4973
a 4 v	a 4 v	a 4 v
v 1 b	v 1 b	v 1 b
AM 3670	AM 4656	AM 4990
a 4 v	a 4 v	a 4 v
v 1 b	v 1 b	v 1 b
AM 12126	AM 4697	AM 5589
a 4 v	a 4 v	a 4 v
v 1 b	v 1 b	v 1 b

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1910phae.proj.1029M

Var. cont.

am 6289
a 4 v
v 1 b

am 6369
a 4 v
v 1 b

am 6407
a 4 v
v 1 b

am 6435
a 4 v
v 1 b

am 6477
a 4 v
v 1 b

am 6499
a 4 v
v 1 b

am 6669
a 4 v
v 1 b

am 6735
a 4 v
v 1 b

am 6938
a 4 v
v 1 b

am 7132
a 4 v
v 1 b

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1910phae.proj.1029M

Entered on card

January 4, 1916.

Variable found by Banachiewicz namely — Pegasi
Dm. +17° 1 (0 2.8 +18 19 (1901)).

The following plates show, said star not seen.

MC 6225	Sept. 12, 1914 (blue)
MC 4485	Dec. 15, 1913 (yellow)
A 8022	August 20, 1906
I 312	Dec. 12, 1889 (earliest plate)
I 4471	Oct. 8, 1891
I 21098	Aug. 20, 1898
I 24000	Nov. 8, 1899.

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1910phae.proj.1029M

Entered on card

January 27, 1916

Var. susp. by Olcott. in Region of Map of the Sky near χ Canis Majoris. 0432-74. Marked on L. Campbell's chart of χ Canis.

The only Maps of Sky Plates found were those of the 2nd Map. AC 4714 + AC 12193. Although not a DM star, it appears on these plates and the following:-

I 24600	Feb. 13, 1900
AC 4619	Feb. 8, 1904
AC 3014	Nov. 23, 1902
MC 8413	April 13, 1915
AC 3210	Jan. 23, 1903
AC 3145	Jan. 5, 1903
AC 4714	March 8, 1904
AC 12193	Dec. 9, 1910
AC 156	Jan. 12, 1899
AC 2143	Jan. 3, 1902

1st Map of Sky AC3924 Sept. 12, 1903
AC3933 Sept. 13. 1903
} These plates show star.

~~If Olcott had 1st Map of Sky, at present date, I cannot find original map of Sky. See circular 71.~~

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1910phae.proj.1029M

Tuesday, February 1, 1916.

On DM. chart of S Hydrae 8 48 +3,4
two stars 8.2 mag. + 8.9 mag. one just free. + other just
following, rather, were susp. of being variable in magn.
that is 8.9 br. 8.2. L. Campbell.

MC 4378 blue Nov. 23, 1913
MC 4372 yellow. Nov. 22, 1913

These plates show 8.2 br. than 8.9.

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1910phae.proj.1029M

Entered on card

Wednesday, March 15, 1916

In answer to letter dated March 12, 1916, from Howard Eaton of Madison, Wisconsin, in regard to var. or nova susp. in region of S.S. Auriga 060547, the following plates have been examined with susp. star always slightly brighter than b, which is comp. K with magn. 10.8 in var. seq. S.S. Aurigae, making this star magn. approx. 10.5. There are two exceptions to this in AC 1907, Oct. 25, 1901 +

AC 4614 Feb. 7, 1904 on which the star appears slightly fainter than b. This may be due to photographic changes. D M +47°1268 magn. 9.3

List of AC plates examined :-

10823	Sept. 17, 1909 -
10915	Oct. 12, 1909 ✓
5908	Jan. 28, 1905 ✓
12626	Oct. 9, 1911
12586	Sept. 26, 1911
8262	Feb. 18, 1907 -
8257	Feb. 15, 1907 ✓
5948	Feb. 4, 1905 ✓
4556	Jan. 24, 1904 ✓
3233	Jan. 31, 1903 ✓
3202	Jan. 21, 1903 ✓
2430	March 25, 1902 ✓

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1910phae.proj.1029M

Entered on card

Tuesday, April 11, 1916.

DM +39° 567 magn. 9.3 + DM +39° 568 magn. 9.1
+39° 567 magn. 9.3 appears much br. than +39° 568 magn. 9.1 on photographs, therefore same susp. of variability by Prof. Wilson.

a = +39° 566 2 25.2 +39 39 8.3 } Marked on I 15792
b = +38° 507 2 25.3 +38 55 8.8 }

The susp. var. always appears about half way between "a" and "b" on the following plates, taken between the years 1902 and 1915

AC 2743
17074 Dec. 4, 1915
16805
10713
9164
8980
6883
4317
3299
2135 Jan 1, 1902

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1910phae.proj.1029M

May 11, 1916.

Search for T Boötis
Said to be seen by ——— April 18, 1916

aI 14812 ✓ April 29, 1916 a = +19°2769 magn. 8.5 T invisible
a 4 N <8.9
b = +19°2766 magn. 9.0
c = +19°2768 magn. 9.8

aI 14814 ✓ April 29, 1916
a 3 N <8.8

aI 14824 ✓ May 2, 1916
b 1 N <9.1

aI 14835 ✓ May 6, 1916
a 2 N <8.7

aC 17475 ✓ April 2, 1916
b 8 N Plate shows my ft stars. No trace of T
c 3 N < 10.1

aC 17564 ✓ May 4, 1916.
a 3 N <8.8

aI 14800 ✓ April 15, 1916
b 1 N <9.1

aC 17177 ✓ T invisible stars at least a magn fainter than b
Dec. 30, 1915. < 10.0

aC 6232 ✓ March 30, 1905
b 6 N
< 9.6

aC 16217 ✓ March 8, 1915
c 8 N < 10.6 T invisible
Stars 1½ magn. fainter than b on this plate.

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May 11, 1916.

Search for T Bootis (cont.)

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1910phae.proj.1029M

Entered on card

August 7, 1916

Variable suspected by Howard O. Eaton in letter received June 28, 1916.

In region of R R Andromedae 004533

Star marked on AC ~~5232~~ 5231 (0 00 +30.0) also marked on chart of R R Andromedae.

The following AC plates examined show no variation.

AC	5231	Sept. 6, 1904
AC	1010	Sept. 22, 1900
	1757	Sept. 20, 1901
	3109	Dec. 28, 1902
	3216	Jan. 26, 1903
	6574	Aug. 3, 1905
	8850	Oct. 9, 1907
	14797	Jan. 22, 1914
	15904	Dec. 20, 1914
	16815	Oct. 6, 1915
	17697	June 29, 1916.

About = to e in photographic magn. of R.R Androm. which is =

e 2v 11.25 11, 21

v 1 f 11.17

MC 4016.

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1910phae.proj.1029M

Last entered on card, monitoring for [illegible]

Friday, November 3, 1916

Variable suspected by Metcalf on AC 322.

The following AC plates examined by A J C and found no variation.

AC 496 + 563 Multiple image.

~~5636~~

AC 3495

11740

11765

11782

11794

11803

11809

11905

11977

11689

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1910phae.proj.1029M

November 14, 1916.

Var. discovered by Metcalf on AM 921.

+7°3302, 16 59 39 + 7 59 [9.1]

The following AM plates show variation.

AM 2693 ft
6431 ft.
4927 br.
10821 br.

These plates were examined bfre a second plate showing var. faint was found.

5106	5428	3074
5097	5414	3090
4989	5359	3421
4969	7245	3442
7028	6014	2525
6440	10796	6865
6057	10840	6982
3566	10911	7076
3536	2617	7232
6504	2654	2580
5600	2764	7176
5581	2824	
5528	2895	

Identical with B 41293.

Range obtained from c.s of H.S. Cg. Max. 9.1 Min 10.1
March 12, 1917.

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1910phae.proj.1029M

November 14, 1916.

Var. discovered by Metcalf on a Mg2.

+16° 31' 30" 17 4 28.9 +16 31.8 [8.3]

Identt. on I 30400.

The following a M plates show variation about 0.6.

a M 5707 br. I 23295
7106 ft. 15842
6936 ft. 11036 } no variation
7003 br. 8666

6865 2617
6982 2654
7076 br. 2764 br.
7232 2824
2580 3074
5106 br. 3090
6057 10821
3566 br. 6431
6504 br. 342.1 ft.
5600 3442
5428 2525 ft.
5414 br.
5359
7245 normal.
10840

Compared with Cearte reg. 17.0 +10. Range 8.6 max. Min 9.2,
March 12, 1917.

This var. was examined by H S L.
Confirming same with range 8.4 — 8.8.

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1910phae.proj.1029M

December 11, 1916.

Var. susp. by Barnard at
(1855) $2^h\ 3^m\ 40.4^s$ +57° 40'.
Abut 5's of +57° 520.
Identt. on I 15954. Marked on MC 6496 with "relative" magnitude (obtained from Argelander method) 12.~~28~~ 49* Faint on MC 7113.
Invisible on AC 14894 which shows faint stars.

The following AC plates show faint star with c.s. "a" visible.

AC 16008	Jan. 10, 1915.	The following I plates examined,
14704	Dec. 27, 1913	Dec. 15, 1916, show variation.
15967	Jan. 5, 1915	I 23567 Sept. 17, 1899 c.s "a" sem. var. n.s.
14789	Jan. 18, 1914	I 19670 Nov. 30, 1897 var. about = to c.s "a"
13751	Feb. 8, 1913	I 19459. Nov. 4, 1897 var. faint.
12799	Dec, 20, 1911	I 17401 Feb. 24, 1897 var. faint
15824	Dec. 10, 1914	I 18390 Aug. 2, 1897. var. extremely faint if visible.
12682	Oct. 27, 1911	I 15258. June 3, 1896. var. n.s.
11127	Dec. 6, 1909	"c.s" (a) is visible on all these plates.

AC 14894 Feb. 21, 1914. * Altitude correction.
MC 6496 Sept. 28, 1914
MC 7113 Dec, 10, 1914. var. 13.4

a.f.C

I 19670, assumg a = 12.59, var about 12.
I 15258 var. n.s. Does not appear fainter than a star
I 18390. Barely glimpsed.
I 17401 about 15 mag
I 19459 " "
I 23567 n.s. Shld image less than a visible

(See next page)

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1910phae.proj.1029M

Barnard's vanilla Mc 6496.

Var.	11 2 v	12.38		
	v 2 12	12.38		
	Mean	12.38	Corr. for alt. +.21	Magn. 12.59
a (bit comp)	11 2 v	12.38		
	v 1 12	12.48		
		12.43	Corr for alt. +.21	12.64
a (ft. comp.)	15 2 a	13.58		
	a 3 16	13.56		
		13.57	~~Corr. for alt. +.21~~	13.78

Magnitudes determined by
M. L. O'R.

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1910phae.proj.1029M

Entered on card.

January 9, 1917.

Variable suspected by L. Campbell near
X Camelop. ♂ 4 32 74. (magn. 9.8. on photographic
chart) Identt. on I 26395, marked on AC 16932.

Ten A C plates examined show no variation.

AC 16932	Nov. 5, 1915.
12311	Jan. 24, 1911.
7827	Sept. 18, 1906
6850	Oct. 16, 1905
4836	April 14, 1904
4115	Oct. 27, 1903
3014	Nov. 23, 1902
2143	Jan. 3, 1902
11304	Jan. 15, 1910
9332	March 12, 1908
15974	Jan. 7, 1915.

Susp. var. is always .2 < a and .5 > b.

a = +74° 206 magn. 9.2
b = +74° 216 magn. 9.5

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1910phae.proj.1029M

Entered on card

Friday, Jan. 23, 1916.

Variable $-0^{\circ}615$ suspected by Dr. Vanderbilt.

Chart on I 24408 also

C.S. "a" + "b"

~~"b" $= +0^{\circ}610$ magn. 8.9~~ "a" $-0^{\circ}621$ magn. 9.5

~~a-b = 0~~ "b" $+0^{\circ}667$ magn. 9.5

a = var. AC 2378 March 3, 1902.

vary b

P 296 not satisfactory upp.
B 992

AM 6569 a = var. Sept. 9, 1909 var ? b.

AC 17171 a = var Dec. 30, 1915 var ? b.

AC 12183 a = var Dec. 8, 1910 var ? b

AM 5819 a = var. Sept. 13, 1908 var ? b

AC 18045 a = var Oct 23, 1916 var ? b

AC 7976 a = var Nov. 6, 1906 var ? b.

AM 5252 a = var Nov. 13, 1907 var ? b

AC 18070 a = var Oct. 27, 1916 var ft. b m.s. Oct. 22, 1905 var ? b

AM 6211 a = var Sept 1, 1909 var ? b

AC 1692 a = var Aug. 28, 1901 var barely seen b. m.s.

AC 5695 a = var Dec. 9, 1904 var ? b

AC 15883 a = var Dec. 17, 1914 var ? b

AC 13757 a = var. Feb. 9, 1913 var ? b

I 3197 a = var., var seen very few plate. Dec. 24, 1888

AC 15915 a = var Dec. 20, 1914 var ? b

AC 13407 a = var. Oct. 30, 1912 var ? b

I 24408 a = var. Jan. 8, 1900 var b b.

AC 16852 a = var Oct. 16, 1915 var ? b

AC 12299 a = var Jan. 18, 1911 var ? b

no variation on above plate. Always about = to "a" and .7 "b"

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1910phae.proj.1029M

Entered on card

Sunday, Feb. 6, 1917

Var., +39° 4,52 20 16.4 +39 59 8.8 (1855), suspected by T W Backhouse. The following AC plates were examined by A J Cannon and found to have slight variations, but which may be due to character of images.

Identified on I 31260

C.S. a +40° 4138 – 9.3

b +40° 4134 – 9.4

AC 16641 slightly > a Aug. 11, 1915. Ex 64

✓ AC 15509 Sept. 19, 1914
a 1 v
v 3 b

✓ AC 5182 Aug. 26, 1904
a 2 v
v 2 b

✓ AC 5112 July 30, 1904
a 1 v
v 3 b

AC 16787 Sept. 28, 1915
a 1 v
v 3 b

✓ AC 10515 May 20, 1909
a 2 v
v 2 b

✓ AC 3404 March 6, 1903/4

✓ AC 6640 Aug 29, 1905
a 3 v
v 1 b

✓ AC 15512 Sept. 20, 1914

These plates taken with Jewett

✓ AC 5072 July 18, 1904
a 2 v
v 3 b

✓ AC 15496 Sept. 7, 1914.

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1910phae.proj.1029M

Entered on card.

September 17, 1917

No. 99 on AC 14734 marked by a pupil of Dr. Chant. DM +43° 1787 8 (5.3) +43 24 (9.1) 1855 as being variable.

The following AC plates show no variation

AC 6866	Oct. 21, 1905
AC 16707	Sept. 9, 1915
AC 13549	Dec. 4, 1912
AC 12543	Sept. 3, 1911
AC 5745	Dec. 18, 1904
AC 5158	Aug. 21, 1903
AC 3127	Dec. 31, 1902
AC 2153	Jan. 3, 1902
AC 2063	Dec. 6, 1901
AC 1883	Oct. 19, 1901

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1910phae.proj.1029M

Entered on card.

Sept. 17, 1917.

No. 98 on AC 14402 same as No. 97 on AC 15712, marked by a pupil of Dr. Chant, DM +63° 2008, 23 24.7 +63 13 (9.1) 1855, as being variable.

The following AC plates show no variation.

AC 4182 Nov. 8, 1903
AC 812 April 11, 1900
AC 11262 Jan. 7, 1910
AC 11462 Mar. 11, 1910
AC 10860 Oct. 2, 1909
AC 9890 Nov. 5, 1908
AC 7231 Jan. 29, 1906
AC 4821 April 12, 1904
AC 3399 March 6, 1903
AC 2454 April 3, 1902.

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1910phae.proj.1029M

Sept. 18, 1917

A letter received from Wm. J. Delubrot, dated Sept. 16, 1917, stated that the c.s. in S. Arietis suspected of variability.

Marked on I 1356 1. c.s. a, b, c.

The following plates examined.

'b' exceeding ft. mag. by 1 deft. on.

mi' var 2 < c I 9497

mi' var. 2 < c I 4724 Nov. 4, 1891

mi' var 2 < c I 10528 Jan. 22, 1894

mi' var 2 < c I 24492 Jan. 29, 1900

mi' var. 2 < c I 24636 Feb. 20, 1900

mi' var. 2 < c I 29737 Dec. 28, 1902

mi' var. 2 < c I 32142 Oct. 6, 1904

mi' var 2 < c I 17187 Jan. 25, 1897

mi' var 2 < c I 5192 Dec. 17, 1891

mi' var. 2 < c I 24108 Nov. 29, 1899

mi var. 2 < c I 10,071 Nov. 26, 1892

mi var < 2 c AC 1842 Jan 12, 1917

AC 1917 Sept. 11, 1917 plus star numbered limiting mag. plate 11.0

AC 1914 1 Latin plate Sept. 14, 1917. limit. magn. 10.0.

This plate does not show star "a".

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1910phae.proj.1029M

February 15, 1918.

From the Yerkes Observatory, Southport. Joseph Barnard.
Approx. 1855 for. $20^h\ 6^m\ 12^s.7$ $+16^\circ\ 56'.0$. About 10.3.
magn. variation to 13 susp. by above. Marked on I 25879
" " AC 2933

The following plates examined since —

I 4129 Sept. 2, 1891,
I a barely seen.
var. n. s.
"b" n. s.

I 7054 Sept. 16, 1892
a 3 v
v = b
v 2 c

I 8877 July 21, 1893
a 3 v
v = b
v 2 c

I 16258 Oct. 24, 1896
a 3 v
v = b
v 1 c

I 17668 March 25, 1897
a 2 v
v = b
v 1 c

I 17910 April 18, 1897
a 2 v
v = b
v 2 c

I 18655 Sept. 5, 1897
a 3 v
v = b
v 1 c

I 23584 Sept. 20, 1899
a 2 v
v 1 b

I 25719 Sept. 1, 1900
a 3 v
v = b
v 1 c

AC 1541 June 15, 1901
c 2 v
v. barely vis.

11.43

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1910phae.proj.1029M

Feb. 15, 1918.

(Counts) variables.

AC 2933 Oct. 25, 1902
c 2 v
v 1 d

AC 7780 Sept. 4, 1906
c 2 v
v 1 d

AC 10965 Oct. 25, 1909
c 2 v
v 1 d
"d" not as br. as usual.

AC 17650 June 4, 1916
b 1 v
c v. s.

~~AC~~ AM 1984 June 1, 1903
b 1 v
v 2 c

AM 2729 June 7, 1904
b 1 v
v 2 c

AM 3670 June 24, 1905
b 1 v
v 2 c

AM 4855 May 22, 1907
c 2 v
v 1 d

AM 5589 June 21, 1908
c 2 v
v 1 d

I 25436 June 9, 1900
I 16133 Oct. 9, 1896
I 16001 Sept. 23, 1896
I 29152 Aug. 23, 1902
I 18051 May 4, 1897
I 19525 Nov. 9, 1897
I 20832 June 7, 1898
I 20837 June 9, 1898
I 21181 Sept. 13, 1898

These plates don't show any variation.

Feb. 20, 1918.
Magn. est. between 6.5 7 + 8 on 88 K. inter. scale. 11.33

a = 11.13
b = 11.23
c = 11.43
d = 11.63
} on I 25879

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1910phae.proj.1029M

February 26, 1919

U Triang. 1 47 +33 3 (approx. 1855)
Not cat. stars. Observations made to identf. var.
Following plates examined:

I 8021 Feb. 4, 1893
I 5399 Jan. 16, 1892
I 3251 Mar. 7, 1891
I 1874 Sept. 25, 1890
I 8039 Feb. 12, 1893
I 36090 June 18, 1909
I 24562 Feb. 6, 1900
I 4350 Sept 25, 1891
I 7943 Jan. 22, 1893
I 8030 Feb 8, 1893
I 8160 Mar. 2, 1893
I 14010 Dec. 3, 1895
I 16873 Dec. 24, 1896 shows ft. stars.
I 18831 Sept. 14, 1897
I 22073 Dec. 28, 1898
I 27388 Aug. 28, 1901
I 29616 Dec. 5, 1902 shows ft. stars

Can't find a star var. in this prs. after having exam. the above plates.

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1910phae.proj.1029M

Work laid up for Miss Saints.

Dec. 10, 1918

Var. S Apodis 145971
Certainly var.

B 18948 very br.
B 27625 nov.
B 21473 ft.
A 4533 very ft.
B 17313
17117
16609
16387
16187
15926
15730
15691
6341
B 46932 br.
B 46984 very br.

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1910phae.proj.1029M

Dec. 10, 1918.

Var. R Doradus. 04 3562
Slight variation. Certainly var.

AM 10143
9628
9597
10147
10155
10195
10227
9664
9513
10144
9644
9410
5109
9668

10315 br.
9379 br.
9343 br.
10235 br.
10300 br.
10295 br.
10269 ft.
655 ft.
2266 ft.

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1910phae.proj.1029M

March 14, 1919

3 marked wks

A letter received from Hague: about sup. var. +32°354
1h 49m 30.s7 +32 28.0 (1855). Letter states
AC 18363 & 15. light constant, but on Feb. 4, 1919 magn. = 10.
c.s. A

We have no plates taken Feb. 4. 1919
One on Feb. 3, 1919 AC 18161 shows no var.
" " Feb. 5, 1919 AC 21069 shows no var.

The plates exam. between the following dates show no var.

AC Plates:

AC 18363	Dec. 19, 1916	AC 7910	Oct. 12, 1906
AC 20910	Jan. 6, 1919	AC 12289	Jan. 16, 1911
AC 5555	Nov. 18, 1904	AC 13606	Dec. 26, 1912
AC 3205	Jan. 22, 1903		
3180	Jan. 17, 1903	I 5399	Jan. 16, 1892
2752	Aug. 14, 1902	3251	Mar. 7, 1891
2318	Feb. 11, 1902	1874	Sept. 25, 1890
2173	Jan. 9, 1902		
2162	Jan. 5, 1902		
20821	Dec. 17, 1918		
20625	Oct. 31, 1918		
20566	Oct. 3, 1918		
19790	Feb. 8, 1918		
19567	Dec. 9, 1917		
19310	Oct. 20, 1917		
19024	Aug. 10, 1917		
I 36090	June 18, 1909		

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Cont. taken as a var. using c.s. 45 K. as standard,

AC 15363
9.4

AC 19024
9.4

AC 19310
9.4

AC 19568
9.4

AC 19790
9.5

AC 20566
9.4

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1910phae.proj.1029M

October 8, 1919.

11 15 Observing for an asteroid approx pos. for 1900

19 40 − 1 14 for

11 25

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1910phae.proj.1029M

October 14, 1919

DM +45° 1987. 9.5 See letter of 1919, October 2. from Frederick Q. Leonard.

A faint star near position given July 3, 6 and 7, 1919. Near nebula N.G.C. 4051

The following plates examined show:

10 20

MC 7776 Feb. 10, 1915

MC 7861 Feb. 17, 1915

MC 7726 Feb 9, 1915

I 34693 May 20, 1907
I 17779 April 2, 1897
I 25378 May 28, 1900
I 10775 March 7, 1894
I 10867 March 23, 1894
I 20542 t p. March 26, 1898
I 6151 April 24, 1892
I 8513 May 10, 1893 (This plate was marked in the reg.)
I 14793 March 31, 1896 (" " ")
I 17757 April 1, 1897
I 24400 January 6, 1900.
I 33077 May 20, 1905
I 201 Nov. 29, 1889
AC 21578 July 2, 1919 too poor, doesn't show region.

10 35 Magn. compared with Carte du Ciel 12 00 +46.5

Found to be nebula Nov. 14, 1919 13.8

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1910phae.proj.1029M

October 16, 1919

1 00 Letter from Schlesinger dated Oct. 11, 1919.

1 15 Var. susp. by him in region of T Cygni 20 43 +34.0

fillms same by 20m of arc and is about 4m north.

2 00 Marked on I 32052. No MC plates cover region.

The following plate examined show very slight variation if any. doubtful 3.5 Prong pr. at first 2nd exp.

I 16404 Oct. 31, 1896 ~~fr. slightly~~ 4.30

I 18964 Sept 21, 1897 ~~fr. slightly~~

I 23075 June 25, 1899

I 18852 Sept. 15, 1897

I 11678 Oct. 17, 1894

I 7121 Sept 20, 1892 ~~br.~~

I 27548 Sept. 24, 1901

I 21912 Dec. 7, 1898

I 33472 Oct 6, 1905 ~~br.~~

I 32047 Sept 16, 1904

I 15425 July 2, 1896

I 32052 Sept. 17, 1904

I 27645 Sept. 30, 1901

I 23647 Sept. 23, 1899

I 21134 Aug 28, 1898 ~~fr. slightly~~

I 16143 Oct. 9, 1896

2 20 I 14743 March 27, 1896

~~Very slightly var.~~

Pos. means from A 2837

Uncertain about identfcation of this star as there are several it could be. Had HS & wife identify. Exam. plate once more for var. and found none.

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1910phae.proj.1029M

this letter was dated

October 30, 1919

~~25~~ Star for Schlesinger cont. Meas. to determine magns. if C.S. useful to confirm var. susps. by him,

Harv. Sch.

a = Sch. b

c = " a

d = " c

d = " d

$b^1 = 0$

$b^2 = 0$

Sq. of 65K marked from MC 4174.

		AC 17632	AC 17845	
1.50	$b^2 = 0$	= 11.6	11.3	= 11.45
	$b^1 = 0$	= 10.7	10.9	= 10.80
	d = d	= 10.6	10.2	= 10.40
	a = b	= 10.2	10.4	= 10.30
	c = c	= 10.4	11.4	= 10.40
	a = d	= 11.4	11.2	= 11.30

~~AC 178~~

AC 17845 — I 32052

10.8 — 10.8

AC 17471 Mar. 31, 1916 — I 16404

10.9 — 10.8

AC 17632 May 25, 1916 — I 15753

10.6 — 10.7

2 30

AC 2,517 June 11, 1919 — I 2.912

Images def, — 10.8

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1910phae.proj.1029M

October 31, 1919

g 40 Schlesinger's suspected variable continued.

AC 1870
10.8

AC 2866
10.7

AC 2924
10.8

AC 4256
10.4

AC 5117 AC 5117
10.4 10.6?

AC 5182 AC 5182
10.4 10.6? Very difficult images to meas.
b' appears d.

AC 13226
10.6

AC 15496
10.6

AC 15509
10.6

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