KG
11365
595

1909phae.proj..596w

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KG 11365.595

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1909phae.proj..59W

KG 11365.595

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1909phae.proj..596W

Mar. 23, 1909. (Tuesday)

δ Orionis

5 27 −0.4
7 57 W Allo. Rows Rec Phot W.
2 30 95 in cap used

Index Right + Below A.

126.5
1406 14.1 v
306.6
3205 13.9 v
240 v −4.vv v

126.7
140.4 13.7 v −4.v7 v
306.4
320.2 13.8 v
27.v v −4.v9 v

Index left + Above B.

36.9
50.3 13.4 v
217.4
229.8 12.4 v
25.8 v −4.73 v

37.2
50.1 12.9 v −4.71 v
216.6
230.0 13.4 v
26.3 v −4.69 v
Mean −4.64 v

7 43 0

7 49 40
92 40. v
7 46 20. v
+v −21 v
12 4v v9. v
α 329. v 319 v

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1909phae.proj..596W

Mar 23, 1909.

Same Again. II

Index Left & above B.

37.0		
50.4	13.4	
217.3	12.7	
230.0	26.1	−4.71
36.9		
50.3	13.4	−4.67
216.5	13.6	
230.1	27.0	−4.63

Index Right & Below A.

306.4		
320.2	13.8	
126.8	13.3	
140.1	27.1	−4.63
306.3	14.0	−4.58
320.3		
126.2	14.3	
140.5	28.3	−4.53

Mean −4.62

Gen. " −4.63

7 52 45

7 59 5

11 50.

7 55 55.

+5 −21.

12 55 34.

329.536

1909phae.proj..596W

Mar. 23, 1909.

R U. Monocerotis

6 50 -8.0
8 30 W dbs Bouse Rec. Phot T.
1 40

Index R+a A.

218.4 ✓ comp Star Dbs
292.5 74.1 ✓
42.1
105.4 63.3 ✓
137.4 ✓ +0.83 ✓

8 19 15

226.7
284.2 57.5 ✓ +0.90 ✓
36.9
110.5 73.6 ✓
131.1 ✓ +0.96 ✓

Index 1+B B. Bad seeing.

122.7 ~~219~~
207.8 ~~208.6~~ 42.1 ✓
312.3 ~~310.3~~ 67.0 ✓
19.3 ~~111~~ 109.1 ✓ +0.53 ✓

seeing much improved

133.3
198.6 65.3 ✓ +0.57 ✓
302.7
25.6 104.9 ✓ +0.61 ✓
129.4 ✓ Mean +0.74 ✓

8 32 40
✓1 ✓5 ✓
2 2✓ ✓8. ✓
+✓ -21 ✓
13 2✓ 37. ✓
A3849. ✓✓94 ✓

S.T. 9 1
H.A. +2 10
Dec -7.1
P.A. 60.1 Vernier B
Spucket. -6.5 A, -5.5 B, -5.0 C.

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1909phae.proj...596W

Mar. 23, 1909

Z. Persei.

2 31 +41.6
9 6
6 35 W. Obs. Rowe Rec. Phot. T.

Index Ltg B.
120.7 ← Comp. Star Dia.
210.0 89.3
315.2
15.4 60.2
149.5 +0.52

133.6 62.3 +0.61
195.9
302.2 84.5
26.7 146.8 +0.64

Index Rt B. A.
31.6
117.5
223.0
282.3

Set 3,
60.5
77.3
137.8 +0.82

45.3 35.9
105.8 184.3 78.4 +0.83
217.0 226.8
284.2 285.3 58.5 +0.84
136.9 mean +0.72

8 59 15

9 16 30
9 8 15
13.5 4.5

9 7 2.5
+5 -2.1 S.T. 9 43
14 7 31.4 H.A. +7 7
3 8 9.5 8 26 Dec. +42.1
P.A. 196.7 Vernier B
Sprocket -5.5 8 -4.5 6

over.

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1909phae.proj..596W

Mar 23, 1909.

In previous groups, the difference between original third and fourth sets for some reason was a little large. It was at first thought that it was in the fourth set so that said fourth set was retaken. But as the fifth set agreed very closely with the fourth, the inference seems to be that it was probably in the third set for some unknown reason so that the third set was rejected and the fourth and fifth retained.

Region low, seeing somewhat blurry.

Double Star (New list) = Burnham's Cat No 3458

6	27	+22.2
10	17	
3	50	

P.A. 243° Dist 53" Mags

U Obs. Rowe Rec Phot W.

Means on following page

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1909phae.proj..596W

Mar 23, 1909.

Index R+a

~~84.7~~ } Wrong image dis.
~~181.2~~ }

183.0 North foll + Brt Dis.
264.2 81.2
3.3 77.7
81.0 157.9 ± 0.40

184.7
262.0 77.3 0.40
2.1
84.0 81.9 / 159.2 ± 0.40

Index L+B

88.3
175.4 87.1
271.3
354.2 82.9 / 170.0 0.19

92.5
173.4 80.9 0.21
269.2
356.0 86.8 / 167.7 0.23
Mean 0.30

~~9 58 10~~

9 59 20

10 6 35

√ √√.
10 2 √84.
+√ −21.
1√ 2 37.
83 89.626 4

W's watch used for times
Watch 21 secs fast

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1909phae.proj..596W

Mar. 23. 1909.

B. + C. 1182.

12 25 35.7
26 35.7

B. 394.

12 25 0,0
26 0,0

Resp. Susp. III Phot. Ht. Ht. Obs. Bowie Rec.
Comp with nearer of ~~two~~ ~~Sats.~~ (~~to~~ limb of Susp.) on
prec. side = Sat. I

12 50 50 ~~False alarm~~ Susp.
False alarm
52 44 " ~~Susp.~~
False alarm
59 8 "
" 51 "
13 01 31 "
10 1 3 2 9 Susp
1 40 4 14 Seen
2 10 " 44 27.9 +3,0 121.0
2 31 3 5 36.7 +2.4 148.9
2 49 " 23 40.3 +2.2 112.2
3 4 " ~~36~~ 42.5 +2.1 152.5
3 16 " 50 49.5 +1.7 110.0
3 37 4 11 54.7 +1.4 159.5
3 51 " 25 59.2 +1,2 104.5
4 2 " 36 64.0 +1,0 164.0
4 15 " 49 67.5 +0.9 100.0
15 4 30 5 4 71.0 +0.7 167.5

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1909phae.proj...596W

March 23, 1909.

1A	4	46	13	5	20	71,0	+0.7	96.5
		2		"	36	71,5	+0.7	167.5
		12		"	46	75.2	+0,	96.0
1A		26		6	0			171.8
				6	24	209		929
1A	6	42,		6	35	242		173.8
		-34.		6	46	226	+0.3	90.8
1A	6	8.		7	3			175.0
				7	19	90.1		88.7
1A	7	41,		7	34	92.3		177.8
		-34.		7	47	91.2	0.0	87.5
1A	7	7.		8	5			179.8
				8	16	91.1		86.1
1A	8	38,		8	31	97,		181.2
		-34		8	45	96.3	-0.2	85.9
1A	8	4,		8	59			183.4
				9	15	97.8		86.2
1A	9	37,		9	30	99.9		184.0
		-34		9	45	98.2	-0.3	84.6
1A	9	3.		9	59			184.5
				10	15	100.4		83.5
1A	10	40.		10	33	100.6		183.9
		-34		10	48	100,	-0.4	83.5
1A	10	6.		11	4			184.1
				11	22	100.1		83.4
1A	11	39,		11	32	99.0		183.5
		-34.		11	46	99.6	-0.4	84.0
1A	11	5,						

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1909phae.proj..596W

March 23 1909

			13	11	11	57		183.0
				12	12	11	99.2	84.3
18	12	3		12	"	26	99.5	183.5
		-34		12	"	43	99.4 -0.4	84.5
18	12	1		12	"	59		184.0
				13	13	15	101.1	83.0
18	13	34		13	"	28	999	184.1
		-34		13	"	42	100.5 -0.4	83.1
18	13	0		13	"	52		183.0
				14	14	4	100.4	82.8
18	14	23		14	"	16	101.2	183.2
		-34		14	"	31	101.1 -0.4	82.5
18	13	49		14	"	42		184.3
				14	"	55	102.2	82.0
18	15	12		15	15	6	100.3	184.2
		-34		15	"	18	101.2 -0.4	82.2
18	14	38		15	"	30		182.5
				15	"	42	102.0	83.5
18	16	3		15	"	57	102.2	183.5
		-34		16	16	13	102.1 -0.5	81.8
18	15	29		16	"	20		184.0
				16	"	30	100.5	82.8
18	16	48		16	"	41	101.6	183.3
		-34		16	"	55	101.0 -0.4	82.0
18	16	14		17	17	6		183.6
				17	"	16	101.8	82.3
18	17	42		17		39	101.3	184.1
		-34					101.6 -0.4	
18	17	8						

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1909phae.proj...596W

March 23, 1909.

	13	17 17	50		82.0	6
		18 18	3		183.3	
		18 "	15	100.5	83.5	
18 18 33.5		18 "	25	102.2	184.0	
-34.5		18 "	39	101.4 -0.4	82.0	7
18 17 59.5		18 "	50		184.2	
		19 19	0	101.3	82.5	
		19 "	12	101.5	183.8	
18 19 18.5		19 "	24	101.4 -0.4	81.5	8
-34.5		19 "	34		183.0	
18 18 44.5		19 "	47	102.0	81.5	
18 20 8.5		20 20	0	103.0	183.5	
-34.5		20 "	16	102.5 -0.5	81.2	9
18 19 34.0		20 "	30		184.2	
		Limits of Dia.				
		22 22	15	29.7	119.5	
18 22 44.5		22 "	31	27.5	149.2	
-34.5		22 "	46	24.6 +3.0	120.5 119.5	
18 22 10.0		23 23	20		148.0	

Seeing ~~bad~~ good.

B. + C. 11 Az.

13	37	33.0	
	38	33.0	

B. 394.

13	37	0.0
	38	0.0

L. A. A.

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1909phae.proj..596W

Mar. 24, 1909 (Wednesday)

R.2. Cassiop.

2 36 +68.0
7 36 W. Obs. Bowa Rec. Plot I
5 0 9.5 m cap used

Index 1+a B. I
444 ← Var. Obs.
105.6 61.2 ✓
235.5 41.7 ✓
277.2 102.9 ✓ −1.79 ✓

7 26 0

55.0 42.6 ✓ −1.76 ✓
97.6
224.6 62.6 ✓
287.2 102.2 ✓ −1.73 ✓

7 28 25

Index R+B A.
309.0 69.6 ✓
18.6
142.0 44.9 ✓
186.9 114.5 ✓ −1.31 ✓

7 31 10

322.5 48.2 ✓ −1.30 ✓
10.7
129.5 67.3 ✓
196.8 115.5 ✓ −1.29 ✓

7 33 25
119 0.
7 29 45 ✓
+5 −19 ✓
12 29 26. ✓
390. ✓ 204 ✓

Mean −1.43 ✓

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1909phae.proj..596W

Mar. 24, 1909

Same Again. II

Index Lt B A.

7 37 0

3695
15.0 65.5 ✓
142.6
189.4 46.8 ✓ 112.3 ✓ −1.36 ✓

7 39 40

322.0
5.9 43.9 ✓ −1.37 ✓
1303
198.1 67.8 111.7 −1.38 ✓

Index Lt A. B.

7 42 35

2281 ✓67.✓ ✓
284.8
52.8
95.6 42.8 ✓ 99.✓ ✓ −1.67 ✓

7 44 45 ✓
164 0. ✓
7 41 0. ✓
+✓ −19. ✓
12 40 41. ✓

£390.✓283 ✓

235.5
274.4 38.9 ✓ −1.67 ✓
42.8
103.4 60.6 99.✓ −1.67 ✓

Mean −1.✓2 ✓

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1909phae.proj..596W

Mar. 24, 1909.

Same Again III

Index Dta B.

		223.0		
7	48	5	285.4	62.4
			55.7	
			94.6	38.9 / 101.3 — −1.62
			236.2	39.0
7	50	15	275.2	−1.67
			46.0	
			103.6	57.6 / 97.6 — −1.72

Index R+B A.

			134.0	60.0
7	53	15	194.0	
			323.9	
			4.8	40.9 / 100.9 — −1.63
			147.2	39.4
7	55	40	186.6	−1.66
			315.0	59.7 / 99.1 — −1.68

207 1

7 51 49

+ 19.

12 51 30

Mean −1.66

390.33

1909phae.proj..596W

Mar. 24, 1909.

Same Again. IV

Index Rt B. A.

8 8 0

133.1
193.6
325.6
33

60.√ ✓
37.7 ✓
92.2 ✓ −1.70 ✓

8 2 30

145.2
185.6
316.2
12.5

40.4 ✓ −1.72 ✓
√6.3 ✓
96.7 ✓ −1.74 ✓

Index Rt a B.

8 6 5

49.0
101.7
238.6
270.9

√2.4 ✓
32.3 ✓
45 ✓ −2.06 ✓

8 7 55

58.2
90.8

32.6 ✓ −2.02 ✓

228.9
279.5

√0.6 ✓
43.2 ✓ −2.10 ✓

16 30. ✓

24 2. ✓

+√ −19. ✓

133 49. ✓

A 390. √443 ✓

Mean −1.90 ✓

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1909phae.proj..596M

Mar. 24, 1909.

Same above V
Index Lt a B.

48.7
98.0 49.3 ✓
239.7
270.3 30.6 ✓
79.9 ✓ − 2.20 ✓

8 11 35

57.2
91.5 34.3 ✓ − 2.16 ✓
228.6
276.8 48.2 ✓
42.5 ✓ − 2.12 ✓

8 13 50

Index Rt B. A.

318.5 ✓ 0.4 ✓
9.3
147.5 37.3 ✓
182.8 36.1 ✓ − 2.02 ✓

8 16 55

329.1
1.5 32.4 ✓ − 2.09 ✓
140.4
189.1 48.7 ✓
41.1 ✓ − 2.16 ✓

Mean − 2.12 ✓

8 19 40

62 0. ✓
4 15 ✓ 30. ✓
+ ✓ −19. ✓
13 15 ✓ 11.
4390. ✓ ✓ 22 ✓

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1909phae.proj..596W

Mar. 24, 1909.

Same Again FI
Index R+B
322.8
8 25 55 10.1
150.4
182.8
Stopped by clouds

S.T. 8 53
H.A +6 11
Dec +69.8
P-A 208.7 Vernier B
Sprocket. -5, 5B, -4.5-6

Observations made throughout through light cloud but of progressively increasing density. The observations in general were more or less difficult, there being some moonlight and increasing cloudiness. The last whole groups (V) was the most troublesome, on account of faintness of images at equalization, the density of the cloud some of the time being such that a few of the settings were a little uncertain. The other four groups are considered good and it is thought by W. that the fifth groups will be pretty good. The sixth group could not be finished

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1909phae.proj..596W

Mar. 24, 1909

Double Star (New List) = Burnham's Cat 6134

12 15 +27.7.
9 15
3 0
9 0

W. Obs Rows Rev Phot W.

P.A. 245° Dist 9"

Index.

Too cloudy

8

W's watch used for times

Watch 19 secs fast.

L. P. P.

8

8

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1909phae.proj...596W

Mar 26, 1909. (Friday)

$\bar{0}$ Chronos

5	27	-0.4
8	47	W Abs Rous Rec Phot W
3	20	9.5 in cap used

Index Lt A B.

8 22 45

37.1
50.1 13.0 ✓
217.0
230.2 13.2 ✓ / 26.2 ✓ -4.70 ✓

36.8 13.6 ✓ -4.69 ✓
50.4
217.0 12.8 ✓ / 26.4 ✓ -4.68 ✓
229.8

Index R+B A.

~~3066~~ 306.8
~~blouds~~ 320.2 13.4 ✓
126.5
140.4 13.9 ✓ / 27.3 ✓ -4.61 ✓

306.6 13.7 ✓ -4.61 ✓
320.3
126.7 13.6 ✓ / 27.3 ✓ -4.61 ✓
140.3

Mean -4.6 ✓

8 58 55

A 1 40. ✓
A 40 ✓0. ✓
+✓ -1 A. ✓
13 40 32. ✓

A 392. ✓69A ✓

over.

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1909phae.proj..596W

Mar. 26, 1909

Troubled throughout with clouds and somewhat low altitude. It became so cloudy that Obs. had to wait in order to take last part of group and that was partly taken through clouds but observations considered pretty good.

Too cloudy for anything further

W's watch used for times.
Watch 18 secs. fast.

L. P. P.

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1909phae.proj..596W

Mar. 27. 1909. (Saturday).

δ Aurigae. K. obs.
Phot. I. 7" cap.
4 52 +43.6

More cloudy again. and steadily growing worse.

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1909phae.proj..596M

Mar. 29, 1909. (Monday)

δ Orionis

5	27
8	7
2	40

-0.4

W. Obs. Rous Rec. Phot W.
9.5in cap. used

Index Left + above B.

216.8
229.7 12.9 v

37.4
50.1 12.7 v
25.6 v -4.7v v

217.2
229.9 12.7 v -4.71 v

36.5
50.4 13.9 v
26.6 v -4.67 v

Index Right + Below A.

126.6
140.5 13.9 v

306.7
320.2 13.5 v
27.4 v -4.60 v

126.8
140.3 13.5 v -4.60 v

306.4
320.4 14.0 v
27.5 v -4.59 v
Mean -4.66 v

7 3.1 35

7 39 0

70 35. v
7 35 12. v
+v -11. v
12 35 7. v
£ 39v. v 244v

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1909phae.proj..596M

Mar. 29, 1909.

Same again. II

Index R+B A.

7 43 45

126.6	14.0	
140.6		
306.6	13.6	
3202	27.6	−4.59

126.6	13.9	−4.59
140.5		
306.6	13.7	
3203	27.6	−4.59

Index Lta B.

36.8	13.2	
50.0		
217.3	12.7	
230.0	25.9	−4.73

37.1	13.0	−4.72
50.1		
217.2	13.1	
230.3	26.1	−4.71

7 49 30

93 15

7 46 30

+5 −11

12 46 27

mean −4.66

Gen. " −4.66

Δ39, 3322 Seeing pretty good.

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1909phae.proj..596W

Mar. 29, 1909.

Susp. Var. near U. Cephei.

0	50	+81.2
8	55	U Cbs. Bouw Rec. Phot T.
8	5	9.5 in cap used

Index Above A I

212.5 ← Susp. Var. Dis.
296.0 83.5
44.2
105.4 61.2 / 144.7 −0.68

224.6 61.6 −0.63
286.2
31.2 87.9
119.1 149.5 −0.58

Index Below B.

120.6 88.7
209.3
310.6 65.6
16.2 154.3 −0.49

131.0 67.8 −0.48
198.8
299.9 87.4
27.3 157.2 −0.47

Mean −0.56

8 24 20

8 33 25
57 45.
A 28 52.
+5 11.
13 28 41.
839. 516

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1909phae.proj..596M

Mar. 29, 1909.

Same Again. II

Index Below B.

118.2
207.5 89.3
310.9
17.2 66.4
154.7 −0.46

129.9
198.6 68.7 −0.47
301.3
29.4 44.1
156.2 −0.44

Index Above A.

30.7
115.7 85.0
221.6
286.8 65.2
150.2 −0.37

43.9
108.9 65.0 −0.32
211.1
294.6 83.5
148.5 −0.60

Mean −0.42
Gen. " −0.44

9 10 5

10 34.
9 15 18.
+5 −11.
14 5 7

89 5.5 469 S.T. 10 2
HA. +9 3
Dec. +81.8
P.A 340.8 Vernier B
Sprocket −3.5A, −2.5B, −2.0C.

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1909phae.proj..596W

Mar. 29, 1909.

ε Aurigae

4 572 +436

10 32 W Abs. Rows Rec. Phot T.
5 40 7 in. cafs. used

Index 1 to A B.

278.3 ← Var. Dis.
297.3 19.0 ✓
99.4
113.7 14.3 ✓ / 33.3 ✓ −4.17 ✓

280.5
294.3 13.8 ✓ −4.24 ✓
97.7
115.4 17.7 ✓ / 31.5 ✓ −4.30 ✓

Index 1 to B A.

186.2
207.2 21.0 ✓
9.3
24.8 15.5 ✓ / 36.5 ✓ −3.97 ✓

189.4
206.6 17.2 ✓ −3.88 ✓
5.6
28.2 22.6 ✓ / 39.8 ✓ −3.78 ✓
Mean −4.06 ✓

9 56 0

10 3 15

119 15. ✓
9 59 38. ✓
+5 −11. ✓
14 59 27. ✓
239.6246 ✓

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1909phae.proj...590W

Mar 29, 1909

Same again. II

Indep R+B A

186.4
207.2 20.8 v
100
250 15.0 v / 35.8 v −4.01 v

189.9 16.1 v −3.95 v
206.0
5.0
268 21.8 v / 37.9 v −3.89 v

Index Dta. B

97.8 18.6 v
116.4
279.4
295.2 15.8 v / 34.4 v −4.10 v

99.9
114.4 14.5 v −4.11
277.1
296.7 19.6 v / 34.1 v −4.12 v
mean −4.03 v
Gen. " −4.04 v

10 6 30

10 13 33

20 √. v
10 10 2. v
+√ −11. v
1√ 9 √1. v
Δ 39√.63 10 v

S.T. 11 5
H.A +6 8
Dec +44.2
P.A 307.5 Vernier B
Sprocket −11.5 B, −10.5 b or +12.5 B, +13.5 b.

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1909phae.proj..596W

Mar. 29, 1909.

B+b 1182			B, 394.		
10	48	29.0	10	49	0.0
10	49	29.0	10	50	0.0

Reap. Jup. I, Phot W. W Obs, Rowe Rec.
Compared with more remote of two Sats.
(before eclipse) on foll. side = Sat II.

16	17	11	11	16	35			Suspected.	
	17	16	11	16	40			Seen.	
	17	22		"	46			Better Seen.	
16	17	0.		17	14	0.0	+1.7	~~+68.0~~	198.0
	18	6.		"	30	4.1	+1.5	248.0	
	18	18		"	42	11.1	+1.1	~~+63.9~~	193.9
	18	29		"	53	13.8	+1.0	255.8	
	18	38		18	2	16.8	+0.9	~~+61.2~~	191.2
	18	47		"	11	17.1	+0.6	258.8	
	19	18		"	42	17.9	+0.4	184.9	
	19	31		"	55	18.3	+0.3	263.8	
	19	40		19	4	18.4	+0.2	181.5	
	19	50		"	14	18.9	0.0	265.9	
	20	0		"	24	0.0	0.0	177.0	
	20	8		"	32	0.0	0.0	267.0	

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1909phae.proj..596W

Mar. 29, 1909

16	20	29	11	19	53	91.0 0.0	177.0
	20	44		20	12	92.2 −0.1	268.0
	20	57		"	21	94.6 −0.2	175.2
	21	7		"	31		269.8
				20	48	90.0	177.2
16	21	7		21	0		267.0 I
		+36		21	13	91.2	177.2
16	21	43		21	27	90.9 0.0	269.0
				21	40		178.0
16	21	59		21	52	88.8	266.8 II
		+37		22	4	90.4	176.8
16	22	36		22	19	89.6 0.0	267.2
				22	33		177.5
16	22	59		22	49	89.3	266.8 III
		+37		23	10	89.6	177.9
16	23	36		23	24	89.4 0.0	267.5
				23	39		176.2
16	23	59		23	50	90.1	266.3 IV
		+37		24	2	90.0	178.0
16	24	34		24	17	90.0 0.0	268.0
				24	30		177.5
16	24	53		24	43	90.3	267.8 V
		+37		25	2	89.2	178.2
16	25	30		25	17	90.0 0.0	268.0
				25	34		178.2
16	25	59		25	50	89.9	268.1 VI
		+37		26	4	89.2	178.5
16	26	34		26	19	89.6 0.0	267.7

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1909phae.proj..596M

Mar. 29, 1909.

16 26			26	26	33		177.8
			26	"	47	49.1	266.9 VII
+37			27	27	2	49.7	178.2
16 27	3		27	"	17	49.4 0.0	267.9
			27	"	33		177.7
16 27			27	"	45	49.4	267.1 VIII
+34			28	28	7	48.9	178.2
16 28	3		28	"	24	49.2 0.0	267.1
			28	"	41		178.1
16 28			28	"	50	90.2	268.3 IX
+34			29	29	2	48.6	178.4
16 29	37		29	"	22	49.4 0.0	267.0
			29	"	43	49.4	178.1
16 30	7		29	"	59	91.8	267.5 X
+34			30	30	17	90.6 0.0	177.0
16 30			30	"	30		268.8

Limit of Visibility

16 31			31	31	16	41.0	202.8
+38			31	"	40	40.5	243.8
16 32	26		31	"	56	40.8 +2.1	203.7
			32	32	19		244.2

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1900phae.proj...5666

Mar. 29, 1909

Seeing fairly good. Sat. I reappeared a little out of expected place, causing (by necessary adjustment) a little delay in first setting. The reading glass for the phot. circle could not be easily focused and interfered with the head so that readings had to be made cautiously (but with certainty) during the rapid variation of light.

B + L6	11 82		B.	394	
11	46	19.3	11	47	0.0
11	47	19.2	11	48	0.0

W's watch used for times before eclipse.
Watch 11 secs. fast

L. P. P.

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1909phae.proj..596W

Mar. 31, 1909 (Wednesday)

Comp. Star = +38° 611 (8.0)

Var. S. T. Persei. Region examined

2 56 +38.2

8 11

5 15

U. Obs. Rowe Ref. Phot T.

Full Aperture T

Index Left B. I

357.8 ← Comp. Star Dis

8 3 28

36.0 39.0 v

183.8

209.4 25.6 v / 64.6 v + 2.69 v

3.5

8 6 38

29.4 25.9 v + 2.66 v

177.0 40.4 v

217.4 66.3 v + 2.63 v

Index Right A.

267.9

8 10 10

308.0 40.1 v

92.0

119.2 27.2 v / 67.3 v + 2.60 v

274.0

8 13 45

303.0 29.0 v + 2.57 v

87.4

127.5 40.1 v / 69.1 v + 2.54 v

Mean + 2.62 v

33 45 v

∠ ∠ 26. v

+v -12. v

13 ∠ 14. v

∠397. v473 v

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1909phae.proj...596W

Mar 31, 1909.

Same Again. II

Index Right A.

267.0	41.0	
308.0		
91.7	32.2	
123.9	73.2	+2.40
8 16 35		
272.7	24.3	+2.42
301.0		
86.8		
126.6	39.8	
	64.1	+2.57
8 19 15		

Index Left B.

176.1	44.1	
219.2		
3.1		
30.2	27.1	
	71.2	+2.47
8 24 50		
182.0		
208.9	26.9	+2.54
356.0		
36.3	40.3	
	67.2	+2.60

Mean +2.51

8 27 35

	22 / 5
A	22 4
+5	-12
13	21 52

A 397.5566 S.T 9 23

H.A+6 26

Dec. +39.2

P.A. 685 Vernier B

Sprocket. -3.3 B, -2.5 6

over.

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1909phae.proj..596W

Mar 31, 1909.

Region rather low at the start and progressively growing lower, variable faint, although growing somewhat brighter, moon also between the quarter and the full. Observations extremely difficult throughout and settings a little uncertain. Only two groups could be taken.

Asteroid Irene (14).

12	55	+11.7
9	45	W. Obs. Roux Ree
3	10	Phot. T
8	50	

Star b follows star a by about 5.5 secs and is about 16′ north of it.

9 27 Star c precedes star b by 16 secs and is 2.′5 north of it

Mag. of c. 9.1; of b; 8.5; of a. 3.0
Star a is +11° 2529 (3.0)
Star b is +12° 2539 (9.1)

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1909phae.proj..596W

March 31. 1909.

Star c. compared with +11° 2527 (8.5)

(This star c was near the theoret. place of Asteroid Irene (1K) but turned out not to be the Asteroid).

Index R+a A. I

3568 ← Comp. Star Dec.

9 46 30

40.4 43.6 ᵛ

181.2 32.6 ᵛ

213.8 76.2 ᵛ +2.31

359.2 33.4 ᵛ +2.27 ᵛ

175.6 44.3 ᵛ

219.9 78.7 ᵛ +2.23 ᵛ

Index L+B B.

265.2 43.8 ᵛ

309.8

91.8 28.8 ᵛ

120.6 72.6 ᵛ +2.42 ᵛ

272.1 31.0 ᵛ +2.43 ᵛ

303.1

87.1 41.1 ᵛ

128.2 72.1 ᵛ +2.44 ᵛ

mean +2.35 ᵛ

9 54 40

101 10. ᵛ

9 √0 3√ ᵛ

+√ −12. ᵛ

14 √0 23. ᵛ

α 397. 61 α 3 ᵛ

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1909phae.proj..596W

Mar. 31, 1909.

Same Again II

Index 2+B B.

9 58 20

265.5		
310.8	45.3	
92.2		
119.8	27.6	
	72.9	+2.41
272.7	30.2	+2.42
302.9		
85.5		
127.7	42.2	
	72.4	+2.43

Index 2+a A.

175.0		
220.2	45.2	
1.7		
31.8	30.1	
	75.3	+2.34
182.8	29.6	+2.36
212.4		
353.3		
37.8	44.5	
	74.1	+2.37

Mean +2.39

10 7 35

12	55.
10 2	52.
+5	-12.
15 2	46.

A397.6270

S.T. 11 9

H.A -1 49

Dec. +11.0

P.A. 52.1 Vernier B

Sprocket -4.5 B, -3.5 b.

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1909phae.proj...596W

May 31, 1909.

Irene not found in or near its computed position Consequently star c which was not very remote from the theoretical place and which was not in the D. M. was measured as it was barely possible that it might be Irene. It may be, however, that it was rather faint for the D. M. people so was not taken by them.

10 37 Star c now precedes star b, by 16 secs. and is about 2.5 north of it. Hence star c is probably not the asteroid but simply a star

W3 watch used for times.
Watch 12 secs fast.

L. P. P.

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1909phae.proj..596W

April 1, 1909. (Thursday)

δ Chromis

5	27	−0.4
8	7	W. Abs. Bowl Rec
2	40	Phot W.

9.5m cap used

Index L+A B. I

216.8 ← Southern + Brtr. Dis

2303 13.5

36.8

50.2 13.4 / 26.9 −4.64

217.1

230.0 12.9 −4.62

37.0

50.1 13.1 / 26.0 −4.72

Index R+B A.

126.5

140.1 13.6

307.0

320.1 13.1 / 26.7 −4.66

127.0

140.0 13.0 −4.66

306.6

320.3 13.7 / 26.7 −4.66

Mean −4.69

7 26 15

7 32 18

12 28 √7.

δ 39 δ. √201

1909phae.proj..596W

April 1. 1909.

Same Again II

Index Rtn A.

126.6
140.4 13.8 v

306.6
319.8 13.2 v
27.0 v −4.63 v

126.8
140.2 13.4 v −4.64 v

306.8
320.2 13.4 v
26.8 v −4.65 v

Index Rtn. B.

37.0
50.0 13.0 v

217.3
230.0 12.7 v
25.7 v −4.74 v

37.3
49.9 12.6 v −4.72 v

217.0
230.5 13.5 v
26.1 v −4.71 v

Mean − 4.68 v

Gen. " − 4.68 v

7 34 35

7 41 25

76 0. v

7 32 0 v

+v −1v. v

12 37 4v. v

239 A. v 263 v

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1909phae.proj..596W

April 1, 1909

R.U. Monocerotis.

6	50	-8.0	
8	50	W. Obs.	Prism Rec
2	0		Phot T.

Index R+A A.

251.9	Comp-Star Obs.	
324.5	72.6	
79.1		
135.2	56.1 / 128.7	+1.00

260.0		
314.5	54.5	+0.92
67.6		
143.7	76.1 / 130.6	+0.97

Index L+B B.

153.2		
232.5	79.3	
345.6		
45.7	60.1 / 139.4	+0.79

166.9		
226.2	59.3	+0.76
336.5		
59.6	83.1 / 142.4	+0.73

Mean +0.87

8 13 40

8 21 20

	3	0.
8	17	30
+5		-1
13	17	5.

8398.5 36

S.T. 9 24
H.A+2 32
Dec. -7.1
P.A. 60.0 Farmer B.
Sprocket -6.5 B, -5.5 b

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1909phae.proj..596W

April 1, 1909.

Fourth Type Star -1° 2312

9 32 −0.5

9 42 W Obs. Power Rec. Phot T.

0 10

Index Lt B A.

168.6 ← Comp Star Dec

8 56 15 227.3 √2.7 √

354.6

39.1 44.√ √ / 103.2 √ +1.√2 √

174.7 4√.3 √ +1.√6 √

220.0

346.9

467 √9.2 √ / 10√.1 √ +1.√3 √

Index Rt A A.

77.6 √7.1 √

134.7

264.8 44.1 √ / 101.2 √ +1.63 √

85.0 44.6 √ +1.64 √

129.6

260.0 √√.2 √ / 99.2 √ +1.66 √

315.2 Mean +1.60 √

9 3 55

0 10. √

9 0 √. √

+√ −1√. √ S.T. 10 5

13 √9 √0. √ H.A +0 16

2 39 A. √2 32 √ Dec −1.1

P.A. 21.3 Vernier B

Sprocket −4.4 A, −3.5 B, −3.0 b.

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1909phae.proj..596W

April 1, 1909.

Brief examination of region of Asteroid Irene (14)

12	55	+117
10	15	
2	40	
9	20	

Brief examination of region of asteroid made
No object of any such brightness as the indicated
brightness of the asteroid in this immediate
vicinity. Will not delay longer in the examination
as photograph of this region is to be taken tonight

Double Star (New List) = Burnham's Cat 7121

15	1	+48.1
11	1	
4	0	
8	0	

W. Obs. Rough Rec. Phot W.

There is an error in distance between components
as given in working double star book. Will look the
matter up in Burnham's Cat. and see if there is
an error there. Instead of the distance being 60" it
should be about 6". Seeing too bad to measure as
close a double tonight

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1909phae.proj..596W

April 1, 1909.

Double Star (New List) = Burnham's Cat 7344

15	34	+ 36.6
11	19	W. Obs. Rough Rec. Phot W.
4	15	
7	45	P. A. 86° Dist 15" Mags

Index R+B

358.6 ← Prec. Comp. Dist.

10 25 45

85.6 87.0 ✓

175.9

2678 91.9 ✓

178.9 ✓ −0.02 ✓

355.7

87.2 91.5 ✓ +0.02 ✓

1763

267.6 92.3 ✓

183.8 ✓

176.2 ✓ +0.07 ✓

Index Lta

2672

3564 89.2 ✓

862

175.1 88.9 ✓

173.1 ✓ −0.03 ✓

265.6

356.0 90.4 ✓ +0.02 ✓

10 33 15

85.4

178.2 92.8 ✓

173.2 ✓ +0.06 ✓

176.8 ✓ mean +0.02 ✓

	59	0. ✓
10	29	30. ✓
+5		−15. ✓
15	29	15."

3982.64 ✓2 ✓

Components about equal. Above measurements make preceding component slightly faintest ... Seeing very blurry Observations difficult

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1909phae.proj..596W

April 1, 1909.

W's watch used for time
Watch 15 secs. fast.

L. P. P.

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1909phae.proj..596W

April 7, 1909 (Wednesday).

Double Star (New List) = Burnham's Cat. 6857

14 19 −19.5
11 19 W. Ab Rour Rec. Plate Va
3 0
9 0 P. A. 296° Dist. 35

Index Rate

358.5
827 Δ 4.2 v
1843
2569 72.6 v / 176.8 v 0.44 v

10 3 35

8.5
79.8 71.3 v 0.46 v
179.6
262.7 Δ 3.1 v / 174.4 v 0.49 v

Index Rate B

269.0
354.0 Δ 5.0 v
92.0
168.6 76.6 v / 161.6 v 0.32 v

275.5
349.4 73.9 v 0.32 v
89.0
174.0 Δ 5.0 v / 174.9 v 0.40 v
mean 0.42 v

10 9 0
12 3 v.
10 6 12. v
+ v −2. v
16 v 6 16.4
Δ 404.6294 v

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1909phae.proj..596W

April 7, 1909.

B+L. 1182			B 394		
10	24	54.0	10	25	0.0
10	25	54.0	10	26	0.0

Reapp. Jup. IV Phot W. W. Obs Power Rec

Compared with Sat. on preceding side
= Sat. II

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1909phae.proj...596W

April 7, 1909.

			10	59	46			False Alarm
			11	1	23			" "
16	7	14		7	7			Suspected
16	7	14		8	7			Suspected + probably seen.
16	8	34		8	27			Certainly + Easily seen.
16	9	54		9	51	29.0	+2.9	117.0
16	10	5		10	8	37.9	+2.6	146.0
16	10	35		"	28	39.8	+2.2	113.1
16	10	49		"	42	41.8	+2.1	152.9
16	11	4		"	57	41.5	+2.1	111.5
16	11	24		11	17	43.0	+2.0	153.0
16	11	35		"	28	45.0	+1.9	110.0
16	11	56		"	49	45.9	+1.9	155.0
16	12	11		12	4	47.0	+1.8	109.1
16	12	24		"	17	47.9	+1.8	156.1
16	12	42		"	35	49.8	+1.7	108.2
16	12	53		"	46			158.0
				13	1			104.8
16	13	21		"	13	55.9		160.7
		+7.		"	28	57.3 / 56.6	+1.3	104.0
16	13	28.		"	43			161.3
				"	57			103.7
16	14	22		14	13	58.1		161.8
		+7.		"	29	61.3		101.9
16	14	29.		"	47	59.7	+1.2	163.2
				15	3	62.5		100.5
16	15	39.		"	31	63.0		163.0
		+7.		"	54	62.4	+1.1	99.8
16	15	46.						

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1909phae.proj..590W

April 7, 1909.

	11	16	8			162.8
		"	23	62.7		101.0
16 16 43.		"	37.	63.1	+1.1	163.7
+7.		"	51			99.5
16 16 50.		17	0			163.0
		"	13	65.7		98.6
16 17 37.		"	29			164.3
+7.		"	45	66.4 / 66.2	+0.9	99.0
16 17 44.		18	1			165.8
		"	15			97.8
16 18 33.		"	26	67.4		165.2
+7.		"	37	69.0 / 68.2	+0.8	97.2
16 18 40.		"	53			166.2
		19	14	69.0		97.0
16 19 32.		"	28			166.0
+7.		"	39	70.0 / 69.5	+0.5	96.4
16 19 39.		"	51			166.4
		20	9			97.5
16 20 27.		"	17	70.0		167.5
+8.		"	38	72.0 / 71.0	+0.7	95.5
16 20 35.		"	48			167.5
		21	1	72.1		96.0
16 21 21.		"	14			168.1
+8.		"	28	70.3 / 71.2	+0.7	97.2
16 21 29.		"	41			167.5
		"	52			97.0
16 22 10.		22	3	70.1		167.5
+8.		"	17	73.0 / 71.6	+0.7	95.5
16 22 18.						

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1909phae.proj...596W

April 7, 1909

	11	22	27			168.5
		"	41			95.9
16 23 0.		"	54	73.4		168.3
+2.		23	1	72.5		96.0
16 23 2		"	16	72.4	+0.7	168.5
		"	27			96.2
16 23 46.		"	39	71.2		168.0
+2.		"	52	73.7		95.3
16 23 54.		24	4	72.2	+0.7	169.0
		"	14			95.8
16 24 34		"	25	72.7		168.5
+2.		"	41	73.2	+0.6	95.2
16 24 42.		"	54	73.2		169.0
		25	12			96.5
16 25 22		"	22	71.0		167.5 I
+2.		"	34	71.2	+0.7	96.5
16 25 36.		"	46	71.2		168.0
		"	57			963
16 26 24		26	20	73.4		169.7 II
+2		"	33	71.9		96.5
16 26 32.		"	46	72.6	+0.7	168.4
		27	0			963
16 27 14.		"	14	71.7		168.0 III
+2		"	25	71.2		963
16 27 26.		"	35	71.2	+0.7	168.1
		"	48			96.0
16 27 58		"	57	73.0		169.0 IV
+2		28	8	73.0	+0.7	96.0
16 28 10.		"	17			168.0

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1909phae.proj..596W

April 7. 1909

	11	28	37	72.4		97.1	
16 24 7.		"	47	72.2		169.5	I
+2.		29	7	72.3	+0.7	96.8	
16 29		"	18			169.0	
		"	30	71.4		96.7	
16 29 45.		"	40	71.9		168.1	VI
+2.		"	50	71.6	+0.7	96.9	
16 29 48.		30	0			168.8	
		"	11	71.0		97.0	
16 30 27		"	22	72.6		168.8	VII
+2		"	32	71.2	+0.7	96.9	
16 30 34.		"	44			169.5	
		"	57			97.0	
16 31 14.		31	10	70.4		167.8	VIII
+2.		"	22	73.0		95.0	
16 31 23.		"	32	71.9	+0.7	168.0	

Limit of Visibility

	11	32	6	32.2		116.0	
16 32 45.	11	"	35	32.4		148.2	
+2.	11	"	53	32.3	+2.7	116.0	
16 32 53.	11	33	26			148.4	

Seeing pretty good. Sat. IV reappeared pretty close to Sat. II, otherwise it would have been certainly seen and measurements begun a little earlier than they were.

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1909phae.proj..596W

April 7, 1909.

B+b 1182			B 394		
11	45	51.8	11	46	0.0
11	46	51.7	11	47	0.0

Ws watch used for times before eclipse.

Watch 2. secs. fast.

L. A. P.

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1909phae.proj..596W

April 8, 1909 (Thursday)

δ Orionis

5 / 8 / 3 — 27 / 32 / 5

-0.4

W Obs. Rowe Rec. Phot W

9.5 m cap used

Index Lta B. I

216.0 ← Southern + Brit. Obs.

7 13 58

229.6 13.6 v

36.7

49.6 12.9 v / 26.5 v -4.67 v

216.7

229.6 12.9 v -4.66 v

35.2

49.2 14.0 v / 26.9 v -4.64 v

Index Rtb A.

125.8

139.2 13.4 v

306.2

318.9 12.7 v / 26.1 v -4.71 v

126.4

138.8 12.4 v -4.74 v

305.8

318.8 13.0 v / 25.4 v -4.77 v

mean -4.70 v

7 18. 45

32 3√. v

7. 16 10. v

+√ +1. v

12 16 19. v

Δ40√. √113 v

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1909phae.proj...596M

April 8, 1909

Same Again II

Index R+B A.

7 20 15

125.5
139.5 14.0
306.0
318.6 12.6 / 26.6 −4.67

125.6
139.4 13.8 −4.60
305.1
319.7 14.6 / 28.4 −4.72

Index R+a B.

~~35.6~~ 35.8
~~49.7~~ 49.1 13.3
215.6
229.6 14.0 / 27.3 −4.61

35.9
49.1 13.2 −4.72
216.4
229.9 11.5 / 24.7 −4.83

7 26 0
46 17
7 23 43
+7 +1
12 23 9
£40 7 16 4

Mean −4.66
Gen. " −4.68

Variable getting pretty well over into the west, troubled during observations by clouds, seeing blurry, and barometer rising after storm.

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1909phae.proj..596W

April 8, 1909

R. W. Tarn.

3 58 +27.2
9 13 W. Obs. Rouse Rec
5 15 Phot T

Index R+A A. I

77.8 ← Var Obs
8 1 18 132.2 v-4.4v
267.2
305.9 34.7v / 93.1v = 1.23v

85.6 42.0v -1.76v
8 3 20 127.6
257.4 v42.0v / 100.0v -1.66v
315.4

Index L+D B.

343.2 64.1v
8 5 40 47.3
175.2 v47.9v / 110.0v -1.42v
221.1

353.6 44.9v -1.48v
8 7 40 38.5
167.2 v9.2v / 104.7v -1.v4v
227.0

Mean -1.61v

17 v0v
4 24.v
+v +1.v
13 4 29.v
240.v v447v

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1909phae.proj...596M

April 8, 1909.

Same Again. II

Index Lt B B.

8 10 20

345.9
50.2
175.0
219.2 — 64.3 / 44.2 / 108.5 — −1.4 v

8 12 15

351.2
39.8
161.7
230.5 — 68.8 / 117.7 — −1.2 v

Index Rta A.

8 14 25

257.6
315.4
86.0
130.2 — 57.2 / 44.2 / 102.0 — −1.61 v

8 16 20

265.7
308.3
74.7
135.4 — 42.6 / 60.7 / 103.3 — −1.60 v

√3 20. v
2 / 3 20. v
+v +1. v
13 13 21. v
2 40 v. v v 10 v

Mean −1.42 v

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1909phae.proj..596W

April 8, 1909

Same Again. III

Index Rta A.

		260.8		
8	18	30	317.3	√6.√"
			84.4	
			129.4	4√.0" / 101.√" −1.62"
			263.7	4√.2"
8	20	35	308.9	−1.√6"
			75.0	
			135.8	60.8" / 106.0" −1.√1"

Index Rta B.

			161.5	
8	22	15	231.7	70.2"
			351.8	
			44.4	√2.6" / 122.8" −1.13"
			171.4	√4.2" −1.13"
8	25	35	225.6	
			342.8	
			51.5	60.7" / 122.9" −1.13"

Mean − 1.34"

	8 7	1√."
8	21	49."
+√		+1."
	13 21	√0."

8 40√." √√6 8"

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1909phae.proj..596W

April 8, 1909

Same Again. II

Index 4+3 13.

161.6
230.4 64.8 ✓
350.6
43.1 ✓2.✓ ✓
121.3 ✓ −1.16 ✓

δ 26 50

170.6 ✓3.3 ✓ −1.16 ✓
223.9
343.1 64.7 ✓
51.8 122.0 ✓ −1.1✓ ✓

δ 29 40

Index 4+a A.

74.5 6✓.2 ✓
139.7
261.0 ✓0.4 ✓
311.4 11✓.6 ✓ −1.29 ✓

δ 31 55

82.0
131.9 49.9 ✓ −1.26 ✓
253.6
322.1 64.✓ ✓
11✓.4 ✓ −1.23 ✓

Mean −1.21 ✓

δ 34 25
122 ✓0 ✓

α 30 42.✓
+✓ +1.
13 30 43. ✓

α40✓.✓630 ✓

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1909phae.proj..596W

April 8, 1909.

Same Again. I.

Index Rta A.

	73.1	62.1 v	
8 37 10	141.2		
	263.2	47.2 v	
	310.4	11 v.3 v	−1.30 v
	80.0	v 3.6 v	−1.22 v
8 39 50	133.6		
	253.0	69.2 v	
	322.2	122.0 v	−1.13 v

Index Rta B.

	337.3	77.2 v	
8 42 10	54.5		
	168.6	v v.1 v	
	223.7	132.3 v	−0.93 v
	348.6	v 3.9 v	−0.92 v
	42.5		
	156.9	79.6 v	
	236.5	133 v v	−0.91 v

mean −1.07 v

8 44 50

	164	0 v
Δ	41	0. v
+v		+1. v
	13 41	1 v

Δ 40 v.v 701 v

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1909phae.proj..596W

April 8, 1909.

Same Again. II

Index L+B B.

8 54 35

336.9
57.8 40.1"
166.1 61.6"
227.7 147.7" −0.7K"

8 58 5

346.7
47.5 60.2" −0.7O"
154.3
239.6 86.3" 146.1" −0.6V"

Index R+a A.

9 1 5

249.0
321.4 72.4"
78.6 59.6"
138.2 132.0" −0.9K"

9 4 50

258.8
314.8 56.0" −0.9O"
66.6
146.3 79.7" 137.7" −0.26"
Mean −0.20"

232 3V"

~~49~~ V9 39."
+V +1."
~~13~~ V9 40."
~~AKOV. 62KO"~~ S.T. 10 33
AKOV. V431" H.A +6 34

Dec +28.2
P.A 310.0 Vernier B
Sprocket −5.5 B, −4.5 b

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1909phae.proj..596W

April 8, 1909.

R.T. Aurigae = 48 Aurigae = Astbury's Susp. Var

6 19 +30.6

11 19 W Obs. Power Rec. Phot 7

5 0 9.5 in cap. used

Index k + B B.

271.4 ← Susp. Var. Dis.

10 6 20

304.2 32.8 v

94.4

119.1 $\frac{28.7^v}{\sqrt{7.5^v}}$ −2.96 v

275.9 22.8 v −2.92 v

298.7

87.2

123.6 $\frac{36.8^v}{\sqrt{9.2^v}}$ −2.89 v

Index R + a A.

177.6 37.7 v

215.3

3.6

29.9 $\frac{26.3^v}{6\sqrt{4.0^v}}$ −2.71 v

183.6 27.0 v −2.70 v

210.6

359.4

37.0 $\frac{37.6^v}{6\sqrt{4.6^v}}$ −2.69 v

mean − 2.81 v

10 13 20

19 40. v

10 9 √0. v

+√ +1. v

√ 9 √1. v

840√. 631 8 v

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1909phae.proj..596W

April 8, 1909.

Same Aq aur II

Index R+a A.

10 15 5

176.5
216.5 40.0ᵛ

4.9
29.3 24.4ᵛ / 64.4ᵛ −2.70ᵛ

183.3 27.0ᵛ −2.70ᵛ
210.3

358.6
36.0 37.4ᵛ / 64.4ᵛ −2.70ᵛ

Index R+B B.

87.6 36.4ᵛ
124.0

273.8
298.7 24.9ᵛ / 61.3ᵛ −2.81ᵛ

95.7 23.0ᵛ −2.84ᵛ
118.7

268.6
305.0 36.4ᵛ / 59.4ᵛ −2.88ᵛ

Mean −2.77ᵛ

Gen. " −2.79ᵛ

10 21 20
36 2v.ᵛ
10 18 12.ᵛ
+v +1.ᵛ
1v 18 13.ᵛ
Eqov. 6376ᵛ

S.T 11 51
H.A. +5 26
Dec +30.9
P.A 101.8
Sprocket −7.5 B, −6.5 b

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1909phae.proj..596W

April 8, 1909.

W's watch used for time
Watch 1 sec slow.

L. P. P.

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1909phae.proj..596W

April 9, 1909. (Friday).

R.V. Persei. Full Aperture.

4 2 +33.2

8 42 W. Obs Roux Rec Phot T

4 40 Comp. Star = +34° 828 (8.9)

Index Left I A.

359.7 ← Comp. Star Drs.

7 48 30 34.7 3.0 ✓

183.8

210.0 26.2 ✓ / 61.2 ✓ +2.41 ✓

3.8

7 52 30 30.7 26.9 ✓ +2.7 ✓

176.7

214.6 37.9 ✓ / 64.2 ✓ +2.64 ✓

Index Right A.

268.6 36.7 ✓

7 57 10 305.3

92.9 24.1 ✓

117.0 60.2 ✓ +2.43 ✓

274.4 24.4 ✓ +2.46 ✓

8 0 15 298.8

89.2 34.7 ✓

123.7 57.9 ✓ +2.90 ✓

Mean +2.80 ✓

24.4 ✓

7 54 1. ✓

+7 +9. ✓

12 54 7 0. ✓

406.7 341 ✓

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1909phae.proj..596W

April 9, 1909.

Same Again. II

Index Right A.

	267.8		
8 6 40	305.5	37.7	
	89.9		
	119.2	29.3 / 67.0	+2.61
	272.8	21.1	
8 12 50	293.9		+2.72
	89.1	36.3 / 57.4	+2.96

Index Left B.

	174.8		
8 16 35	217.8	43.0	
	1.2		
	32.1	30.9 / 73.9	+2.32
	183.2		
8 19 20	210.1	26.9	+2.42
	351.8		
	35.9	44.1 / 71.0	+2.47

Mean +2.60

	√√	2√.
£	13	√1.
+√		+9.
	13	14 0.

2406. √√14

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1909phae.proj...596W

April 9, 1909.

Same Again. III

Index Left B.

8 21 45	173.9		
	218.6	44.7 v	
	359.4		
	31.1	31.7 v	
		76.4 v	+2.30 v
	183.6		
8 26 45	212.9	29.3 v	+2.26 v
	349.9		
	39.5	49.6 v	
		79.9	+2.23 v

Index Right A.

	85.0		
8 29 30	129.7	44.7 v	
	271.5		
	299.0	27.5 v	
		72.2 v	+2.43 v
	91.0		
8 32 10	121.5	30.5 v	+2.35 v
	262.1		
	309.0	46.9 v	
110 10. v		77.4 v	+2.27 v
8 27 32 v			mean + 2.30 v
+v +9. v			
13 27 41. v			
8406. v609 v			

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1909phae.proj..596W

April 9, 1909

Same Agaca II
Index Right A,

8 35 45

82.8
127.8 45.0
271.0
303.0 32.0 / 77.0 +2.2 A

8 39 15

88.8
124.2 35.4 +2.2 K
263.7
308.2 44.5 / 79.9 +2.20

Index Left B.

8 44 25

351.9
42.1 -0.2
178.0
215.5 37.5 / 27.7 +1.9 A

8 47 55

355.8
33.9 34.1 +1.93
171.2
224.3 53.1 / 91.2 +1.8 A

Mean +2.0 A

167 20.
A 41 -0.
+- +9.
13 41 -9.
A 406.-70 A

1909phae.proj..596W

April 9, 1909.

Same Again E

Index Left B.

8 58 55	347.3		
	43.5	+6.2	
	178.1	37.6	
	213.7	91.4	+1.47
8 54 5	354.6	+0.4	
	35.0		+1.44
	172.2	+0.7	
	229	91.1	+1.44

Index Right A.

8 57 35	259.1		
	311.5	+2.4	
	88.6	37.7	
	124.3	44.1	+1.96
	265.6		
	304.4	38.8	+2.00
	823	46.7	
	129.0	44.7	+2.04

Mean +1.94

9 0 45

−223 20

4 ++ +0

++ +9.

13 ++ +9.

4406.+4406 ST 10 36

HA. +6 29

Dec +34.3

P.A. 242.2 Vernier B

Sprocket −5.5A, −4.5B, −4.0b

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1909phae.proj..596W

April 9, 1909.

Observations difficult throughout. At time of beginning the variable was very faint even before the photometer was put on. This was due to the fact that the variable was getting near minimum and also that there was some twilight in the sky. The altitude also was not very high. Although the variable later grew some brighter, the altitude progressively grew lower so that at the end of the observations the object glass was about down to the tops of the lowest small shutter

R. U. Monocerotis.

6	50	-8.0
11	10	W. Obs. Rowe Rec.
4	20	

Abandoned. Too low.

R. T Aurigae = 48 Aurigae = Astburys Var

6	19	+ 30.6
11	9	W. Obs. Rowe Rec
4	50	Phot T.

9.5 in cap used.

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1909phae.proj..596W

April 9, 1909

9 76 5

Index L+B I B.

270.3 ← Disp. Tan. Dis.
302.4 32.1 ✓
93.2
117.9 $\frac{24.7}{\sqrt{6.2}}$ ✓ −2.92 ✓

274.5 24.4 ✓ −2.84 ✓
298.9
88.2
126.0 $\frac{37.2}{6\ 2.2}$ ✓ −2.78 ✓

Index R+A. A.

176.3 37.1 ✓
213.4
2.6
30.8 $\frac{24.2}{6\sqrt{.3}}$ ✓ −2.67 ✓

181.9 27.9 ✓ −2.64 ✓
209.8
357.8
36.4 $\frac{34.6}{6\ 6.\sqrt{}}$ ✓ −2.62 ✓

Mean −2.86 ✓

9 53 20
99 25. ✓
9 49 42. ✓
✓ +9. ✓
14 49 ✓1. ✓
240 6. 6180 ✓

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1909phae.proj..596W

april 9, 1909.

Same Again II

Index Rta A.

1769
2155 36.6 ✓
3.1
323 29.2 ✓ / 67.8 ✓ −2.5 ✓

182.0
209.6 27.6 ✓ −2.5 ✓
3563
388 42.3 ✓ / 69.9 ✓ −2.1 ✓

Index Lt B B.

87.5
125.0 37.5 ✓
2733
299.3 26.0 ✓ / 63.5 ✓ −2.3 ✓

93.4
118.5 25.1 ✓ −2.2 ✓
267.9
301.4 33.5 ✓ / 75.6 ✓ −2.1 ✓

Mean −2.6 ✓
Gen. " −2.7 ✓

9 54 25

10 2.50
117 15. ✓
9k 5A 36. ✓
+5 +9. ✓
14 5A 47. ✓
406.6242 ✓

S.T. 11 40
H.A. +5 16
Dec. +30.9
P-A 103.2 Vernier B
Sprocket −7.5 B. −6.56

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1909phae.proj..596W

April 9. 1909.

W's watch used for times
Watch 9 secs slow

L. P. P.

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1909phae.proj..596W

April 10, 1909. (Saturday)

Z Draconis

11	46	+73.0
9	1	W. Abs. Rows Rec.
2	45	
9	15	Phot. T

Index Lt a B.

344.4		← Comp. Star Abs.
49.2	64.8 ✓	
173.8		
219.7	45.9 ✓	
	110.7 ✓	+1.40 ✓

8 5 55

354.0		
37.4	43.4 ✓	+1.34 ✓
160.7		
230.1	69.4 ✓	
	112.8 ✓	+1.3 ✓

8 8 35

Index R+B d.

252.0		
317.5	65.5 ✓	
85.3		
125.8	40.5 ✓	
	106.0 ✓	+1.51 ✓

8 11 25

263.9		
310.4	46.5 ✓	+1.44 ✓
72.4		
138.6	66.2 ✓	
	112.7 ✓	+1.36 ✓
		mean +1.41 ✓

8 13 45

	39 40	✓
d	9 55.	✓
+v	+22.	✓
13	10 17.	✓

d407. v44d ✓

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1909phae.proj..596W

April 10, 1909

Same Again #

Index Rt (B) A.

8 18 10	253.7		
	314.7	∨9.0 ∨	
	84.6		
	128.0	43.4 ∨	
		102.4 ∨	+1.60 ∨
	265.7		
8 20 25	306.6	40.9 ∨	+1.61 ∨
	76.6		
	137.1	60.5 ∨	
		101.4 ∨	+1.62 ∨

Index Lt a B.

	164.4	61.7 ∨	
8 23 20	226.1		
	356.0	40.9 ∨	
	36.9	102.6 ∨	+1.59 ∨
	173.0	44.7 ∨	+1.58 ∨
	217.7		
	346.0	∨9.0 ∨	
	45.0	103.7 ∨	+1.57 ∨

Mean +1.60 ∨

8 25 30

α 7 2∨. ∨
α 21 ∨1. ∨
+∨ +22. ∨
13 22 13, ∨

α 407. ∨∨70 ∨

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1909phae.proj..596W

April 10, 1909

Same Again III

Index Ltr A B.

168.4
226.8 v 2.4 v
357.4
34.6 37.2 v / 9 v.6 v +1.77 v

175.6
218.3 42.7 v +1.74 v
347.2
42.6 v v 4.8 v / 9 2.1 v +1.70 v

Index RtB A.

78.8
135.0 v 6.2 v
265.5
302.5 37.0 v / 9 3.2 v +1.83 v

86.9
126.4 39.5 v +1.60 v
257.8
313.5 v v.7 v / 9 v.2 v +1.74 v

Mean +1.77 v

8 36 10

8 39 10

8 41 20

8 43 20

160 0 v
2 40 0. v
+v +22. v
13 40 22. v
2 40 7. v 6 96 v

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1909phae.proj...596W

April 10, 1909

Same again IV

Index Rt B A.

8 47 5

79.6
129.8 −0.2
267.7
303.5 3 −.8 / 6.0 +2.02

8 48 50

85.9
123.4 37.−
259.2
311.9 −2.7 / 0.2 +1.91

Index Lt a B.

8 51 20

351.4
43.3 −1.9
179.0
215.1 36.1 / 4.0 +1.97

8 53 5

358.6
32.9 3K.3 +1.9K
169.1
224.5 −7.4 / 9.7 +1.92

200 10

8 −0 2.
+− +22.
13 −0 24.

Mean +1.9−

2407. −767

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1909phae.proj..596W

April 10, 1909.

Same Again. I

Index L+A B.

350.2
42.0 V 1.0 V

178.0 36.1 V
214.1 37.9 V +1.97 V

358.6 3K.3 V +1.96 V
32.9
169.2 V 3.9 V
223.1 22.2 V +1.96 V

Index R+B A.

264.0 K3.3 V
307.3
89.0 31.9 V
120.9 J V.2 V +2.3K V

269.6 30.6 V +2.32 V
300.2
82.0 KV.9 V
127.9 J 6.V V +2.30 V
mean +2.14 V

8 56 30

8 .58 30

9 2 25

9 4 .20

241 4V V
9 0 26. V
+V +22. V
14 0 4K. V
K407. V K39 V

1909phae.proj...596W

April 10, 1909.

Same again VI

Index R+B A.

9 9 30

261.2
308.2 K7.0 v
91.1
122.0 30.9 v
72.9 v +2.26 v

9 11 40

271.2
301.6 30.K v +2.30 v
84.6
129.0 KK.K v
7K.A v +2.3A v

Index R+a B.

9 14 40

175.3
220.0 KK.7 v
358.6
31.0 32.K v
77.1 v +2.2A v

179.6
212.1 32.V v +2.33 v
354.8
36.3 41.V v
7K.0 v +2.3A v
Mean +2.32 v

9 16 38

V220. v
913 V. v
+V +22. v
1413 27. v

A407. V927 v

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1909phae.proj..596M

April 10, 1908

Same Again VII

Index L+a B.

172.7
2195 46.2 ✓
9 19 10

04
288 22.4 ✓ / 70.2 ✓ +2.34 ✓

181.9
209.8 27.9 ✓ +2.46 ✓
9 21 15

354.4
343 39.9 ✓ / 67.2 ✓ +2.52 ✓

Index R+B 4.

85.6
125.0 39.4 ✓
9 25 10

273.0
296.7 23.7 ✓ / 63.1 ✓ +2.74 ✓

91.4
121.5 30.1 ✓ +2.64 ✓
9 28 25

2665
303.0 36.5 ✓ / 66.6 ✓ +2.62 ✓

9 4 0. ✓
9 23 30. ✓
+5 +22. ✓
14 23 52. ✓

Mean +2.57 ✓

S.T. 11 10
A.A -0 32
Dec +72.3
P.A 172.5 Vernier B
Sprocket -3.5 B, -2.5 b.
£407.5999 ✓

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1909phae.proj...596W

April 10, 1909.

48 Aurigae = R.T. Aurigae = Astbury: Variable.

6 19 +30.6
11 39
5 20

W. Obs Roma Rec. Phot T
9.5 in cap. used

Index Lt B I B.

92.4 ✓ Var Dis.
119.6 27.2 ✓
278.8
294.6 1 V. A ✓ / K 3.0 ✓ −3.61 ✓

18 15 45

97.3 16.9 ✓ −3.V A ✓
114.2
273.4 27.K ✓ / KK.3 ✓ −3.V K ✓
300.8

Index R+a A.

2.0 2A.6 ✓
30.8
185.2 20.0 / K A.A ✓ −3.33 ✓
205.2

6.0 20.6 ✓ −3.36 ✓
26.6
181.6 27.0 ✓ / 47.6 ✓ −3.3A ✓
208.6

Mean −3.47 ✓

10 23 30
39 1V. ✓
10 19 3A. ✓
+V +22. ✓
V 20 0. ✓
A407.6309 ✓

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1909phae.proj..596W

April 10, 1909

Same Again II

Index A+a K. A.

0.6
31.4 30.8 ✓

10 25 25

186.2
203.6 17.K 2 / K8.2 ✓ − 3.3√ ✓

5.9 19.K ✓ −3.3K ✓
253
180.0
209.5 29.√ ✓ / K29 ✓ − 3.3 2 ✓

Index A+B K. B.

273.4 24.8 ✓
298.2
97.2 16.9 ✓ / K1.7 ✓ − 3.6 8 ✓
114.1

2762
295.7 19.√ ✓ −3√3 ✓
90.4
118.5 28.1 ✓ / 47.6 ✓ − 3.3 8 ✓

Mean − 3.K4 ✓
Gen. " − 3.46 ✓

10 32 25
√7 √0. ✓
10 28 √√. ✓
+√ +22. ✓
1√ 29 17. ✓
K07.64√3 ✓

S.T. 12 11
H.A. +5 46
Dec +30.9
P.A 101.7 Vernier B
Sprocket. -7.5 B. -6.5 6

L. P. A.

10's watch used for times
Watch 22 secs slow

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1909phae.proj...596W

April 12, 1909 (Monday)

R.X. Geminiorum

6 43 +34.1
9 8 W. Obs. - Rowe Ref Phot T
2 25 Comp. Star = + 33° 1417 (A2)

Index Right A.

264.9 ← Comp. Star Dis
306.3 41.4 ✓
90.9
1204 29.5 ✓ / 70.9 ✓ +2.4A ✓

8 7 15

~~270.2~~ 90.0
~~300~~.3 1219 31.9 ✓ +2.4A ✓

~~8 12 0~~
~~8 10 10~~

265.0
3060 41.0 ✓ / 32.9 ✓ +2.4 ✓

Index Left B.

347.2 51.6 ✓
38.8
180.1 31.1 ✓
211.2 / A 2.7 ✓ +2.1 ✓

8 14 40

358.2 33.0 ✓ +2.1 ✓
31.2
170.6 49.7 ✓
2203 / A 2.7 ✓ +2.1 ✓
Mean + 2.2A ✓

8 16 40

✓0 3✓ ✓
A 12 39. ✓
✓ ~~44~~. ✓
13 13 27. ✓
A 40 9. ✓✓10 ✓

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1909phae.proj..596W

April 12, 1909.

Same Again II

Index Left B.

	35.3		
8 19 30	39.8	4.5	
	180.7		
	210.4	29.7	+2.25
		74.2	
	0.0		
8 21 40	32.9	32.9	+2.15
	168.0		
	220.0	52.0	+2.05
		47.9	

Index Right A.

	262.2		
8 24 20	307.6	45.4	
	90.2		
	119.7	29.5	+2.35
		74.9	
	270.7	29.1	+2.35
	299.8		

Clouds

	82.1	43.6	
	125.7	72.7	+2.42

Mean +2.26

8 26 20

91 50.

22 24.

+5 +44.

13 23 46.

4409.5542

1900phae.proj...596W

April 12, 1909.

Same Again III

Index Right. A.

8 29 45	262.0		
	308.7	46.7 ✓	
	89.0	31.1 ✓	
	120.1	77.6 ✓	+2.26 ✓
8 32 25	270.2		
	301.8	30.6 ✓	+2.27 ✓
	81.0		
	127.2	46.2 ✓	
		77.0 ✓	+2.26 ✓

Index Left. B.

8 35 15	168.8		
	221.7	52.9 ✓	
	358.0		
	31.2	33.2 ✓	
		26.1 ✓	+2.02 ✓
8 37 20	179.7		
	212.2	32.5 ✓	+2.04 ✓
	350.7		
	39.7	49.0 ✓	
		41.5 ✓	+2.15 ✓

Mean +2.12 ✓

134 45. ✓
+ 33 41. ✓
+5 +42. ✓
13 34 29. ✓
+409. 56 6 ✓

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1909phae.proj..596W

April 12, 1909

Same Again. IV

Index left B.

8 43 45	169.4		
	222.6	53.2	
	358.7	33.6	
	32.3	46.6	+2.00
8 46 0	178.8		
	212.1	33.3	+2.06
	350.8		
	40.4	49.6 / 52.9	+2.11

Index Right A.

8 48 40	82.0		
	127.7	45.7	
	269.0		
	300.4	31.4 / 77.1	+2.24
8 50 40	91.3		
	121.3	31.0	+2.30
	263.4		
	308.4	45.0 / 76.0	+2.32

Mean +2.18

129 5.
4 47 16.
+5 +42.
13 42 4.
4409.57 1

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1909phae.proj...696W

April 12, 1909.

Same Again V

Index Right A.

80.6 46.6 ✓

9 6 0 127.2

269.2 34.1 ✓

3033 20.7 ✓ +2.17 ✓

87.2 33.0 ✓ +2.20 ✓

9 7 55 120.2

261.8 47.7 ✓

3075 27.7 ✓ +2.23 ✓

Index Left A.

348.0 ✓46.6 ✓

9 12 20 42.6

177.2 37.9 ✓

213.1 90.✓ ✓ +1.90 ✓

356.1 37.9 ✓ +1.90 ✓

9 15 55 34.0

168.7 ✓2.8

221.5 90.7 ✓ +1.90 ✓

42 10. ✓ Mean +2.0✓ ✓

9 14 2. ✓

+✓ +42 ✓

14 14 ✓0. ✓

A409.✓936 ✓

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1909phae.proj..596W

April 12, 1909

Same Again VI

Index Left. B.

347.4
42.4 55.0
177.1 36.7
213.8 91.7 +1.67

9 25 35

357.0
34.7 37.7 +1.84
165.8
222.1 56.3
94.0 +1.81

9 27 50

Index Right. A.

262.2
310.1 47.9
88.4
121.5 33.1
81.0 +2.17

9 31 15

269.6
302.9 33.3 +2.16
80.8
128.8 48.0
81.3 +2.16
mean +2.00

9 33.50
11 30.
9 29 32.
+5 +42
14 30 26. S.T. 11 29
240.9.60 -HA +4 43
Dec. +33.7
α A. 266-0
Sprocket -6.5 A, -5.5 B, -5.0 C

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1909phae.proj..596W

April 12, 1909.

R. T. Aurigae = 48 Aurigae = Astbury's Var.

6 19 +30.6

4 35 Yb. Obs. Rous Rec. Phot. T

5 16 9.5 in cap used

Index 2+3 B. I

87.4 Var. Dev.

10 2 40

122.1 34.7 ✓

273.3

298.6 25.3 ✓ / 60.0 ✓ −2.46 ✓

93.0 25.2 ✓ −2.44 ✓

118.2

267.8 37.7 ✓ / 60.9 ✓ −2.43 ✓

Index R+A A.

355.6 39.6 ✓

35.2

182.0 26.3 ✓ / 65.9 ✓ −2.65 ✓

1.4 27.4 ✓ −2.60 ✓

28.8

175.3 40.9 ✓ / 64.3 ✓ −2.56 ✓

216.2

mean −2.72 ✓

10 11 10

13 50. ✓

10 6 55. ✓

45 44. ✓

15 7 43.

£409. 6304 ✓

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1909phae.proj..596W

April 12, 1909.

Same Again. II

Index Rta A.

356.2
35.5 39.3 ✓
182.9
208.6 $\frac{27.7}{67.0}$ ✓ −2.62 ✓

1.5
29.5 28.0 ✓ −2.66 ✓
175.4
213.8 $\frac{38.4}{66.4}$ ✓ −2.63 ✓

Index L+B B.

267.0
302.9 35.9 ✓
92.4
116.5 $\frac{24.1}{60.0}$ ✓ −2.46 ✓

272.6
301.2 28.6 ✓ −2.72 ✓
86.6
122.1 $\frac{35.5}{64.1}$ ✓ −2.71
Mean −2.72 ✓
Gen. " −2.72 ✓

L. P. P.

10 13 15

10 22.0

3 ✓ 1 ✓ ✓
10 17 38. ✓
+✓ +4 ✓
1 ✓ 12 26. ✓
409.637 ✓

S.T. 12 8
H.A +5 43
Dec +30.9
P.A 101.6 Vernier B
Sprocket −7.5 B − 6.5 b.

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1909phae.proj..596W

April 12, 1909

W's watch used for times.
Watch 48 sec slow.

L. P. P.

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1909phae.proj..596W

April 13, 1909 (Tuesday)

S. T. Persei

2	56	+38 2	
9	11	W. Obs. Power Rec.	
6	1.5		

6 cloudy

7 50 Sky becoming thickly cloudy.

8 20 Sky cloudy everywhere with apparently no prospect of clearing

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1909phae.proj..596W

April 16, 1909 (Friday)

Double Star (New List) = Burnham's Cat 5303

9	58	-17.5	
9	13	W. Obs. Rowe Rec.	Phot W.
0	45		
11	15.		

Clouds thick in this region

Abandoned. Too cloudy.

Y. Leonis.

9	16	+26.8	
10	26	W. Obs. Rowe Rec.	
1	10		

Region identified and sketch of region made but variable faint at minimum and sky hazy throughout, also became definitely cloudy over whole sky so that variable cannot be followed at present

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1909phae.proj..596W

April 16, 1909.

Double Star (Comstock's List) No 92 = 11 Lyncis AB

9 22 +46.0
11 W. Obs Roux Rec Phot W.
2 22

9 30 Sky cloudy at present time

Sky cloudy every where. No chance for anything.

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1909phae_proj..596W

April 17, 1909 (Saturday)

R.W. Monocerotis

6 16 + 9.0

9 36 W Obs. Bonn Rec. Phot T.

3 20

Comp. Star = +9° 1284 (8.0)

Index Lt a ± B.

3587 ← Comp Star Dist.

8 0 35

308 32.1 v

184.6

207.6 23.0 v

√√.1 v +3.05 v

3.8 23.4 v +3.02 v

8 2 30 27.2

179.0 33.4 v

212.4 √6.0 v +2.92 v

Index R+B A.

271.2 22.2 v

8 5 25 300.0

94.7 20.6 v

115.3 49.4 v +3.30 v

275.0 22.2 v +3.20 v

8 7 50 297.8

88.8 31.2 v

120.0 √4.0 v +3.10 v

16 20 v

4 4 5. v

+√ −14. v

13 3 √1. v

24.14. √443 v

Mean +3.11 v

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1909phae.proj..596W

April 17, 1909

Same Again II

Index Rta A.

8 11 5	268.0		
	302.4	34.4	
	93.0		
	116.8	22.8	
		57.2	+2.97
8 13 20	273.5		
	296.0	22.5	+2.94
	87.8		
	123.7	35.9	
		24.4	+2.92

Index Rta B.

8 16 30	177.4		
	213.8	36.4	
	2.2		
	29.6	27.4	
		63.8	+2.72
8 18 30	182.1		
	208.9	26.8	+2.72
	357.0		
	33.7	36.7	
		63.5	+2.73
		Mean	+2.83

	59	25
A	14	51
+5		-14
	13 14	37

A 414.5 5 5 18

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1909phae.proj..596W

April 17, 1909.

Same Again ##

Mdy Lta B.

177.5
214.0 36.5
1.8
28.2 26.4 / 62.9 +2.7

8 22 25

181.1
209.3 28.2 +2.66
354.6
34.7 40.1 / 62.3 +2.56

8 24 30

Mdy RtB A.

85.7
122.2 36.5
271.6
299.4 27.8 / 64.3 +2.70

8 27 20

91.9
118.0 26.1 +2.69
266.4
305.2 38.8 / 64.9 +2.68

Mean +2.68

8 29 40

23 ..
2 .. 9.
+ .. −14.
13 2 4.

414. .. 96

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1909phae.proj..596M

April 17, 1909

Same Again IV

Index A+B. A.

82.4
125.9 43.5"
271.4 29.2"
300.6 72.7" +2.42"

8 37 45

89.6 29.5" +2.42"
119.1
263.7 42.9"
306.6 72.4" +2.43"

8 40 5

Index Lta B.

351.9 47.6"
39.5
180.4 32.6"
213.0 40.2" +2.19"

8 43 10

357.6 35.0" +2.10"
32.6
171.1 41.0"
222.1 46.0" +2.02"
Mean +2.26"

8 45 30

166 30.5"
α 41 32.8"
+δ -14.4"
13 41 24.4"
α 414.5 704"

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1909phae.proj..596W

April 12, 1909

Same Again. E

Index L+A B.

8 52 30

350.4
38.7 44.3"
177.5
212.6 25.1" / 69.4" +2.10

8 54 50

358.2 34.2" +2.03"
32.4
168.6 15.2" / 49.8" +1.96"

Index R+B. A.

8 57 40

261.1 47.1"
308.2
89.0 31.2" / 78.6" +2.24"
120.5

269.0 34.8" +2.22"
303.8
81.8 44.9" / 79.7" +2.20"
126.7

mean +2.12"

9 0 0

22 0.

2 6 1.

+ -14.

13 6 1.

2414.206"

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1909phae.proj..596M

April 17, 1909.

Same Again. VI

Index Rt B A.

9 18 45

259.8
311.8 +2.0
86.3
122.5 36.2
208.2 +1.96

9 20 45

267.0
305.0 38.0 +1.95
78.5
129.4 +0.9
208.9 +1.94

Index Rt a B.

9 23 25

165.1
224.4 +9.3
355.10
34.9 39.9
99.2 +1.62

173.4
215.6 42.2 +1.62
346.3
43.2 +6.9
99.1 +1.62
Mean +1.62

9 25 15

208 10
9 22 2.
+ -14.
14 21 48.

208 14. + 9 8 -

S T 11 28
H.A +4 57
Dec +9. 3
P.A 348.8 Vernier B
Sprocket -5.5 B, -4.5 b

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1909phae.proj..596M

April 17, 1909.

R.T Amigae = 48 Amigae = Astbury's Var.

6	19	+30.6
12	14	W. Obs. Bonn Rec Phot T
5	55	9.5 cm cap used

10 19 30

Index L+B B.

273.1 < Var. Dis.

299.0 25.9 v

97.7

113.6 15.9 v / 41.8 v — 3.67 v

276.8 18.5 v — 3.52 v

295.3

90.8

120.0 29.2 v / 47.7 v — 3.32 v

Index R+a A.

181.6 20.7 v

210.3

3.8

24.2 20.4 v / 49.1 v — 3.31 v

186.4 19.8 v — 3.30 v

206.2

358.1

28.6 29.9 v / 49.7 v — 3.28 v

mean — 3.41 v

10 26 30

46 0. v

10 23 0. v

+v −14. v

10 22 46. v

+41 46 09 v

Region low. Obs. somewhat difficult.

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1909phae.proj..596M

April 17, 1909

S.T. 12 26
H.A. +6 2
Dec. +30. 9
P.A. 282.0 Vernier B
Sprocket. -7.5 B, -6.5 b.

Double Star (New List) - Burnham's list 6422

13	7	-18.3
12	37	
0	30	
10	30	

W's watch used for times
Watch 14 secs fast.

L. A. P.

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1909phae.proj..596W

April 22, 1909 (Thursday).

R. W. Tani.

8 58 +27.2
9 48 W. dlo Rowe Rec. Phot T.
5 50

Index Rta A. I

163.2 Comp. Star Dlo
227.8 64.6 ✓
327.8
59.9 92.1 ✓
156.7 ✓ +0.44 ✓

7 57 50

145.2 102.2 ✓ +0.20 ✓
247.4
334.2
54.9 A0.7 ✓
1A2.9 ✓
177.1 ✓ −0.0 ✓

8 1 55

Index L+B B.

238.9
336.2 97.3 ✓
72.2
137.2 65.0 ✓
162.3 ✓ +0.34

8 7 20

247.0 75.2 ✓ +0.22 ✓
322.8
55.0 98.9 ✓
153.9 174.7 ✓ +0.10 ✓
Mean +0.21 ✓

8 9 50
2✓6 ✓✓. ✓
4 14. ✓
4✓−1 12 ✓
13 3 2. ✓
4 19. ✓430 ✓

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1909phae.proj..596M

April 22, 1909.

Same Again II

Index D+B B.

225.0
338.0 113.0

64.4
142.9 78.5

191.5
169.2 −0.22

247.0 81.2

8 15 40 328.8 −0.18

524
158.5 106.1

127.9 −0.15
172.1

Index R+A A.

136.0
254.0 118.0

331.5
59.6 272.1

206.1
153.9 −0.50

147.0 92.3

8 21 30 239.3 −0.49

317.5
70.4 112.9

205.2
154.8 −0.42

mean −0.34

69 10.
17 12
−1 12.
16 6.

8 19 5

8

8

8

+

1

2419.5 29

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1909phae.proj...596W

April 22, 1909.

Same Again LII

Index R+a A.

137.1
256.0 118.9 v
327.7
59.9 92.2 v
211.1 v
148.9 v −0.60 v

144.5
241.0 96.5 v −0.64 v
313.8
72.9 119.1 v
215.6 v
144.4 v −0.69 v

Index L+B B.

45.2
160.5 115.3 v

241.2
327.4 86.2 v
201.5 v
142.5 v −0.41 v

62.2
150.0 87.8 v −0.50 v
222.0
345.0 123.0 v
210.8 v
149.2 v −0.59 v

Mean −0.57 v

8 24 50

8 26 40

8 30 45

8 34 10

116 25. v
+ 29 6. v
+ 5 −1 12. v
13 27 43. v

S.T. 10 56
+419.5 −610 v H.A. +6 57
Dec. +28.2
P.A. 132.0 Vernier B
Sprocket −5.5 B, −4.5 b.

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1909phae.proj..596W

April 22, 1909.

Preceding observations of R. W. Tauri very difficult. Altitude low and Twilight strong. In last group, the lower small shutter partly covered the object glass so that in the last settings the object glass was about half covered by the said lower small shutter.

After taking R. W. Tauri, cleaned achromatic prisms on outside. Prisms not taken apart however, and not cleaned on inside

W Herculis

U Herculis.

17	12	+33.2
11	42	
5	30	
6	30	

W. Obs Rouse Rec. Phot I
9.5 oz cap used

Old Comp. Star is the one always (~~had~~ heretofore) used =
= + 33° 2.871 (7.8).
New, provis. C. S. is a new one to be tried provis. to see if Var. or old C.S. varies irregularly.
Star (provis.) C.S. = +32° 2826 (8.7)

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1909phae.proj...596W

April 22, 1909.

μ Herculis compared with new, provis. (trial) Comp. Star.

Index L+B I 13.

4.0 ← Var. Dia.

258 21.4 v

1868

2022 $\frac{17.4\ v}{37.2\ v}$ −3.93

7.6 17.7 v −3.86 v

23.3

183.0 $\frac{24.0\ v}{39.7\ v}$ −3.79 v

207.0

Index R+A A.

275.1 21.2 v

296.3

96.4 $\frac{14.9\ v}{36.1\ v}$ −4.00 v

111.3

278.6 14.7 v −3.99 v

293.3

93.6 $\frac{21.4\ v}{36.3\ v}$ −3.92 v

116.0

Mean −3.92 v

9 54 0

100 N. v

9 v o A. v

+ v −1 12. v

14 42 v 6. v

A 19. 6173 v

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1909phae.proj..596W

April 22, 1909.

Same Again II

Index R + a A.

276.1
296.3 20.2″
97.5
111.8 14.3″ / 34.5″ −4.10″

278.0
293.6 15.6″ −4.06″
94.1
114.4 20.3″ / 35.9″ −4.01″

Index L + B. B.

183.7
206.4 22.7″
6.9
22.8 15.9″ / 38.6″ −3.85″

187.6
202.8 15.2″ −3.87″
3.7
26.4 22.7″ / 37.9″ −3.89″

Mean − 3.96″

9 56 15

10 4.50

	121	5.″
10	0	32.″
+5	−1	12.″
14	59	20.″

A 419.624 + ″ P.A. 161.°5 Vernier B

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1900phae.proj...596W

+33° 2571 April 22, 1909.

Old C. S. for μ Herculis compared with new (trial) C.S. for μ Herc. ~~was used as for old C.S.~~

W. Ala Rowe Rec. Photo T.
9.5 m cap used.

Index. Above A. I

10 5 5.

70.4 ← 62.0 v Old. Comp. Shr dec.
138.4

262.5
306.8 $\frac{44.3^{v}}{112.3}$ −1.36 v

79.6 v2.7 v −1.24 v
132.3

252.6
319.8 $\frac{66.0^{v}}{119.2^{v}}$ −1.20 v

Index Below B.

337.7
49.7 72.0 v

169.8
220.4 $\frac{v0.6^{v}}{122.6^{v}}$ −1.14 v

347.7
42.7 vv.0 v −1.10 v

158.1
228.7 $\frac{70.6^{v}}{12v.6}$ −1.07 v

Mean −1.19 v

10 22 5

27 10. v
10 13 3v v
+v −1. 12. v
1v 12 23. v
8419. 6336 v

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1909phae.proj..596W

April 22, 1909

Same Again II

Index Below B.

3431
51.6 60.V
166.8 VK.A
221.6 1233 −1.12

351.4 47.9 −1.20
39.3
159.8 6A.A
228.6 116.7 −1.27

Index Above A.

250.8 64.0
314.8
82.2 4A.A
131.0 112.A −1.3V

262.0 4V.3 −1.3K
307.3
70.3 6A.1
138.4 113.K −1.3K

Mean −1.27
Gen. " −1.23

18 24 10

18 32 15
V6 2V.
10 2A 12.
V −1 12. S.T 12 55
1V 27 0. H.A −4 24
A419.6438 Dec +32 2
P.A 383 Vernier 03
Sprocket, −4.58 −3.56

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1909phae.proj...596W

April. 22, 1909

Troubled by clouds in last group. Observations at times very difficult.

Also, troubled in next to last group by more or less haze. Last group, however, the more difficult of the two.

W's watch used for times
Watch 1 min. 12 sec fast

L. P. P.

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1909phae.proj..596M

April 23, 1909 (Friday)

R. U. Monocerotis

6	50	-8.0
9	55	U. Ms. Powr. Rec. Phots
3	5	

Index R+a A.

248.8 ← Comp. Slawdis.

7 55 5

324.8	76.0	
76.5		
135.0	4.5 / 13	+0.49
259.4	1.6	+0.96
311.0		
67.8	7.4	
143.2	12.0	+1.04

Index L+B B.

154.1	6.7	
240.8		
346.4	6.5 / 12.2	+0.53
51.9		
166.2	6.9	+0.60
229.1		
334.6	3.0 / 14.9	+0.66
57.6		

Mean +0.70

8 2 35

11 7	40.	S.T. 10 34
7 5	0.	HA +3 42
+5 -1	22.	Dec -7.1
12 5 7	20.	PA. 60.0 Vernier B
420. 399		Sprocket. -6.5 B. -5.5 b

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1909phae_proj..596W

April 23, 1909.

w Herculis

17 12 +33.2
10 57 W. Obs Roue Rec Phot T
6 15 Full aperture.
5 45

Var. compared with new provis. Comp. Star.

Index R to a A. I

94.8 ← Var Dis.
114.7 19.9 v
279.5
293.2 13.7 v / 33.6 v −4.1 v v

98.5 14.2 v −4.0 v
112.7
275.0
296 21.6 v / 35.8 v −4.01 v

Index L to B B.

34 23.0 v
264
1883
204.2 15.9 v / 38.9 v −3.83 v

8.1 15.7 v −3.79 v
23.8
183.1
207.8 24.7 v / 40.4 v −3.7 v v

Mean −3.94 v

8 47 30

8 54 50
102 20. v
+ v−1 10. v
+v . −1 22. v
13 49 48 v

+420. v 763 v

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1909phae.proj..596M

April 23, 1909

Same Again II

Index A to B B.

2.0
27.5 2√.√ᵛ
188.0 17.0ᵛ
205.0 42.√ᵛ −3.63ᵛ

7.3 16.6ᵛ −3.66ᵛ
23.9
182.9 2√.0ᵛ
207.9 41.6ᵛ −3.62ᵛ

Index R to A A.

276.0 21.0ᵛ
297.0
97.4 14.√ᵛ
111.9 3√.√ᵛ −4.03ᵛ

279.4 16.2ᵛ −3.94ᵛ
295.6
93.3 22.2ᵛ
115.5 3 A 4 −3.46ᵛ

Mean −3.80ᵛ
Gen. " −3.87ᵛ

8 58 15

9 6 35

4 √0.ᵛ
9 2 2√.ᵛ
+√ −1 22.ᵛ
14 1 3.ᵛ
A420.√A40ᵛ

Moonlight, comp. star faint. Obs. difficult.

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1909phae.proj..596W

April 23, 1909

Var. compared with old Comp. Star directly,
9.5 μ cap used. U. Obs. Rouse Rec.
Phot. T.

Index Right. A.

88.2 Variables

9 21 50

124.6 36.4 v

273.9

297.8 23.9 v / 60.3 v −2.49 v

93.2 24.7 v −2.50 v

117.9

266.0

304.0 34.0 v / 62.7 v −2.76 v

Index Left. B.

355.3 41.0 v

36.3

182.3

206.8 24.5 v / 65.5 v −2.66 v

33 −2.62 v

30.3 27.0 v

173.6

214.2 40.6 v / 67.6 v −2.59 v

Mean −2.71

9 27 23

49 15 v

9 24 32 v

tv −1 22 v

14 23 16.

α 20.59 v+ v

1909phae.proj..596W

April 23, 1909

Same Again

Index Left B.

355.8
35.9 40.1
181.5
207.1 26.6 / 6 / 7 −2.66

2.9
29.1 26.2 −2.66
175.7
214.0 34.4 / 6 / 0 −2.64

Index Right A.

268.7
303.5 34.8
92.8
117.1 24.3 / 9.1 −2.69

273.6
298.8 25.2 −2.80
84.9
124.1 39.2 / 6 4.4 −2.70

Mean −2.73
Gen. " −2.72

9 36.0

6 40.
9 3 2 0.
+ −1 22.
14 31 24.

Δ 20.60 2

1909phae.proj..596W

+33°2871 April 29, 1909.

Add C. S. for α Herculis compared with new prov. Comp. Star for α Herculis.

W. Ala Power Rec.
Phot T.
9.5m cap used

Index Above A.

72.7 ← Old C.S. Nos.
137.7 6v.0 v
262.7
307.5 44.2 v / 109.2 v −1.42 v

82.1 49.2 v −1.36 v
131.9
251.3 6v.4 v
316.7 11v.2 v −1.30 v

Index Below B.

339.8
48.9 69.1 v
167.2
222.9 v v.7 v / 124.2 v −1.09 v

349.6 v3.2 v −1.02 v
42.8
159.8 71.2 v
231.6 / 12v.0 v −1.02 v
Mean −1.22 v

9 46 30

9 52 30

99 0. v
9 49 30. v
+v −1 22. v
14 48 2. v
α 20.616 v

1909phae.proj..596M

April 23, 1909

Same again
Index Below II B.

341.7
50.4 60.7 v
170.9 v0.7 v
221.6 119.4 v -1.21 v

351.5
41.9 v0.4 v -1.12 v
160.0
231.3 71.3 v -1.16 v
121.7

Index Above A.

252.0
316.8 64.8 v
80.4
131.7 v1.3 v -1.28 v
116.1

262.0
310.2 48.2 v -1.29 v
72.0
139.1 67.1 v -1.30 v
111.3 v

Mean -1.24 v
Gen. " -1.23 v

9 54 20

10 0.15
114 31.' v
10 v7 18.' v
+v -1 22.' v
1v vv v6.' v
λ4420.663A v

ST 12 45
H.A. -4 32
Dec +323
P.A 39.2 Vernier B
Sprocket -4.5 B, -3.5 6

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1909phae.proj..596M

April 23, 1909

C W's watch used for times
Watch 1 min. 22 secs fast

L. P. P.

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1909phae.proj..596M

April 24, 1909. (Saturday)

R. W. Persei

4	8	+41.8
9	43	
5	35	W. Obs. Bonn Rec.

Abandoned.

R. T. Cassiop.

2	36	+69.8
10	6	
7	30	

W. Obs. Bonn Rec. Phot T

Full aperture used

~~Fob~~ For obs. see fol. pages.

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1909phae.proj..596W

April 24, 1909.

Index Lta B. I

264.4 ← Var Dis

8 0 5. 305.1 40.7 ✓

90.8

119.2 24.4 ✓ / 69.1 ✓ −2.1 ✓

270.7

299.5 28.8 ✓ −2.4 ✓

8 2 45 83.0

126.8 43.8 ✓ / 72.6 ✓ −2.4 ✓

Index Rt B A.

170.9

8 5 48 218.8 47.9 ✓

359.5

30.4 30.9 ✓ / 74.8 ✓ −2.23 ✓

179.0

211.5 32.5 ✓ −2.0 ✓

350.9

39.8 48.1 ✓ / 80.6 ✓ −2.18 ✓

mean −2.34 ✓

8 7 30

16 20. ✓

4 5. ✓

+5 −29 ✓

13 3 36. ✓

421. ✓ 442 ✓

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1909phae.proj..596M

April 24, 1909

Same Again II

Index R+B A.

167.8
222.0 54.2 ✓
359.6
30.2 30.6 ✓ / 54.2 ✓ — 2.06 ✓

8 12 40

178.7
212.6 33.9 ✓ — 2.09 ✓

8 15 16

350.6
39.2 48.6 ✓ / 52.7 ✓ — 2.12 ✓

Index L+a B.

80.5
132.0 51.5 ✓
269.6
300.0 30.4 ✓ / 51.9 ✓ — 2.14 ✓

8 18 10

89.8
121.4 31.6 ✓ — 2.12 ✓
262.0
309.1 47.1 ✓ / 74.7 ✓ — 2.23 ✓
mean — 2.14 ✓

8 28 20

66 20. ✓
52 16 35. ✓
+ ✓ −29. ✓
13 16 6. ✓
52 421. ✓ ✓ 29 ✓

1909phae.proj..596W

April 24, 1909.

Same Again III
Index Rta B.

79.6
99.9 20.3 Rej. Something wrong.
268.2
289.9 20.9
41.2

80.4
121.4 40.0 ✓
258.7
318.4 √1.7 ✓
92.7 ✓ −1.84 ✓

Index R+B +.
347.4 √√.4 ✓
428

177.2
117.8 40.6 ✓
96.0 ✓ −1.76 ✓

357.3
33.6 36.3 ✓ −1.79 ✓
165.8
2232 √7.4 ✓
93.7 ✓ −1.82 ✓
Mean −1.82 ✓

8 25 15

8 27 20

8 30 48

8 32 55
~~46 10~~ ✓
~~29 2.~~ ✓
~~+√ −29~~ ✓
~~13 22 −33.~~ ✓
~~421. √6 +√~~ ✓

90 √√. ✓
8 30 18 ✓
+√ −29. ✓
13 29 49. ✓
8421. √624 ✓

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1909phae.proj..596M

April 24, 1909.

Same Again. IV

Index L+a A.

8	43	50	346.4	√6.6√
			43.0	
			174.1	
			216.3	42.2√
				84.8√ −1.69√
8	46	55	355.7	34.2√ −1.66√
			33.9	
			163.5	
			226.2	62.7√
				100.9√ −1.63√

Index L+a B.

8	49	50	254.3	60.√
			314.8	
			84.6	
			126.4	41.8√
				102.3√ −1.60√
8	52	20	264.7	41.6√ −1.√8√
			306.3	
			73.6	
			136.4	62.8√
				104.4√ −1.√√√

Mean −1.62√

192 √√.√

8 48 14.√

+√ −29.√

13 47 4√.√

8421.√749√

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1909phae.proj...596w

April 24, 1909.

Same Again E

Index Lt a B.

252.8
316.2 63.4 v
84.3
127.5 43.2 v
106.6 v −1.v−0 v

8 56 15

9 0 40
~~8 58 45~~

~~264.5~~ 73.1
~~307.6~~ 138.2 6v.1 v −1.4A v
263.4
306.8 43.4 v
104.v −1.4v v

Index R+B A.

340.3
48.9 62.6 v
171.7
218.1 46.4 v
11v.0 v −1.30 v

9 3 35

351.7
37.7 46.0 v −1.33 v
161.4
2280 66.6 v
112.6 v −1.36 v
mean −1.40 v

9 6 0
246 30, v 1
9 1 34 v
tv −29, v
14 1 9, v
A421.vA41 R.T. 11 42
H.A. +8 59
Dec +69.8
PA 210.6 Vernier B
Sprocket −5.5B −4.5b

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1909phae.proj..596W

April 24, 1909

ζ Herculis and Add Comp. Star

17 12 +33.2
11 47 ζ Abs Bonn Rec.
5 25 Phot T
6 35
9.5 μ cap used

Index left B.

355.8 ← Var Dist.
33.2 37.4 v
181.6
207.2 25.6 v / 63.0 v −2.7 v v

9 36 50

2.6 2.6 v v −2.6 A v
29.1
174.1 40.2 v / 66.7 v −2.62 v
214.3

Index Right A.

267.7 34.7 v
302.4
92.8 24.4 v / 59.1 v −2.09 v
117.2

272.9 25.6 v −2.00 v
298.5
88.8 33.2 v / 59.4 v −2.00 A v
122.6
Mean −2.30 A v

9 44 15

A1 V1 v
9 40 32. v
+V −29. v
14 40 3. v
A421.6111 v

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1909phae.proj...596W

April 24, 1909.

Same Again II

Index Right A.

9 46 15

265.6
304.4 38.8 ✓

92.1
118.7 26.6 ✓ / 6 ✓.4 ✓ − 2.66 ✓

272.9
298.0 25.1 ✓ − 2.72 ✓

86.5
123.5 37.0 ✓ / 62.1 ✓ − 2.70 ✓

Index Left B1

174.4
214.7 40.3 ✓

2.4
29.2 26.8 ✓ / 67.1 ✓ − 2.60 ✓

181.4
208.9 27.5 − 2.57 ✓

353.7
35.1 41.4 ✓ / 60.9 − 2.54 ✓.

Mean − 2.64 ✓

9 53 25
101 40. ✓
9 50 50 ✓
f ✓ −29 ✓
14 50 21 ✓
α 421.6 / α 3 ✓

Poss. Corr. in above groups gave constant trouble by rotating from weight of handle and displacing rings. Rej. Two additional groups taken, holding handle while observing.

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1909phae.proj..596M

April 24, 1909.

Same Again II

Index Left B.

174.3		
213.7	39.4 ✓	
2.0		
29.0	27.0 ✓	
	66.4 ✓	−2.63 ✓
180.8		
208.1	27.3 ✓	−2.62 ✓
354.4		
34.4	40.0 ✓	
	67.3 ✓	−2.60 ✓

Index Right A.

84.5		
121.9	37.4 ✓	
273.0		
298.8	25.8 ✓	
	63.2 ✓	−2.74 ✓
92.9		
118.5	25.6 ✓	−2.72 ✓
267.5		
306.1	38.6 ✓	
	64.2 ✓	−2.71 ✓

Mean −2.69 ✓

10 3 35

10 9 50

	13	25. ✓
10	6	42. ✓
+✓		−29 ✓
1✓	6	13. ✓

£421.6293 ✓

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1909phae.proj...596W

April 24, 1909.

+33° 2871

Old B.S. compared with New, provisional, B.S.

W. Obs. Rowe Ree. Photo T

Index Above A.

	255.0	Old B.S. Dis.	
10 20 20	318.0	63.0 v	
	78.8		
	128.9	v 0.1 v / 113.1 v	−1.3 v v
	261.7		
	308.0	46.3 v	−1.36 v
	71.0		
	137.2	66.2 v / 112.v v	−1.36 v

Index Below B.

	158.0		
	229.3	71.3 v	
	348.5		
	43.2	v 4.7 v / 126.0 v	−1.06 v
	166.5		
	218.9	v 2.4 v	−1.06 v
	338.3		
	52.1	73.8 v / 126.2 v	−1.06 v
			mean −1.21 v

10 26 15

46 3v. v

10 23 18 v

+v −29. v

1v 22 49. v

2421.6409 v

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1909phae.proj..596W

April 24, 1909.

Same Again II

Index Below B.

157.0
229.0 72.0 v
348.2
43.4 vv.2 v / 127.2 v −1.04 v

167.1
222.4 vv.3 v −1.04 v
341.4
353.0 71.6 v / 126.9 v −1.04 v

Index Above. A.

708
137.5 66.7 v
261.9
3088 66.9 v / 113.6 v −1.3 v

78.3
130.8 v2.v v −1.29 v
251.2
316.5 6v.3 v / 117.8 v −1.24 v

Mean −1.16 v

L. A. P.

10 28 35

10 34. 30
63 v. v
10 31 32. v
+v −29. v
1v 31 3. v

Δ 421.646v v

S. T. 13 9
H A −4 7
Dec −132 3
P.A. 38.7 Vernier B
Sprocket. −5.5 B, −4.5 b
B's watch used for time. Watch 29 secs fast.

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1909phae.proj...596W

April 26, 1909. (Monday).

R. T. Aurigae = 48 Aurigae = Astbury's Variable.
6 19 +30°.6
10 19 W. Obs. Prov. Rec. Phot. T
4 0 9.5 in cafs used.

Index Lt B B. I
87.8 ← Vanadis
8 2 45 1205 32.7 ✓
275.8
296.8 21.0 ✓ / √3.7 ✓ −3.11 ✓

94.0 20.2 ✓ −3.11 ✓
114.2
269.2 33.√ ✓
302.7 / √3.7 ✓ −3.11 ✓

Index R+A A.
357.2 36.4 ✓
37.0
183.4 22.6 ✓
206.0 / √9.4 ✓ −2.22 ✓

4.2 23.1 ✓ −2.22 ✓
8 13 35 27.3
16 20.✓ S.T 10 55 176.0
+√ A A 10.✓ H.A.+4 30 36.√ ✓
−√4.✓ Dec +30.9 212.5 / √9.6 ✓ −2.27 ✓
13 7 16. P.A. 102.0 Vernier B Mean − 3.00 ✓
A+23.√467 Sprocket −8.5 B. −7.5 La

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1909phae.proj..596M

April 26, 1909.

α Hercules compared with old 6.8.

17	12	+33.2
11	7	W. Obs. Bruce Tel. Phot. T.
6	5	
5	55	9.5 in cap used

Index Left. B. I

356.2	← Var. Dis.	
35.4	39.2	
179.4		
211.8	32.4	
	71.6	−2.4

358.9	32.0	−2.4
30.9		
175.4		
216.1	40.7	
	72.7	−2.42

Index Right. A.

266.9	37.7	
304.6		
85.6		
121.2	35.6	
	73.3	−2.40

269.8	34.7	−2.42
304.5		
84.7		
122.4	37.7	
	72.4	−2.43

Mean −2.43

8 39 20

8 48 25

	47	45
4	43	42
+4	—	44
13	42	48

α 23. 715

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1909phae.proj...596W

April 26, 1909.

Same Again. II

Index Right A.

267.0		
305.3	38.3	
87.6		
119.4	31.8	
	70.1	−2.70
270.5		
300.8	30.3	−2.70
83.2		
123.2	40.0	
	70.3	−2.70

Index Left. B.

172.5		
213.4	40.9	
355.1		
32.6	37.5	
	78.4	−2.24
177.3		
213.9	36.6	−2.26
353.0		
33.7	40.7	
	77.3	−2.24

Mean − 2.32

Gen. " − 2.40

8 50 10

8 56 5

106 1.7

8 3 8.

+7 −4.

13 2 14.

8423.779

1909phae.proj..596M

April 26, 1909.

+33° 2871

Add b.s. compared with new provisional b.s.

W. Abs Pour Rec Phot 7

9.5 m exposed

Index Above A.

73.0 ← Add b.s. Dis.		
137.5	64.5 v	
261.3		
309.1	47.8 v / 112.3 v	−1.36 v
77.9	57.5 v	−1.26 v
132.4		
252.0	66.4 v / 120.9 v	−1.17 v

Index Below B.

338.5		
53.0	74.5 v	
167.7		
220.1	52.4 v / 126.9 v	−1.04 v
347.5	57.1 v	−1.01 v
44.6		
157.4	72.8 v / 129.9 v	−0.98 v

mean −1.14 v

9 8 0

9 14 50

22 50. v

9 11 25. v

+5 −54. v

14 10 31. v

4423.5907 v

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1909phae.proj..590

April 26, 1909.

Same Again. II

Index Below B.

336.8
52.4 } 15.6 v

167.1
222.8 } 55.7 v / 131.3 v −0.95 v

348.3
40.8 } 72.5 v −1.00 v

157.2
231.0 } 73.8 v / 126.3 v −1.06 v

Index Above A.

251.7
320.7 } 69.0 v

79.8
130.5 } 50.7 v / 119.7 v −1.20 v

261.0
308.5 } 47.5 v −1.27 v

72.0
138.8 } 66.0 v / 113.5 v −1.34 v

Mean −1.14 v

9 18 45

9 26 15

45 0 v

9 22 30. v

+v −4. v

14 21 36. v

A423.5 v 923 v

1909phae.proj..596W

April 26. 1909

Same Again. III

Index Above A.

251.7
318.8 67.1 ✓

80.1
129.7 49.6 ✓
117.7 ✓ +1.27 ✓

261.6
308.5 46.9 ✓ −1.28 ✓

69.5
138.2 68.7 ✓
117.6 ✓ −1.29 ✓

Index Below B.

348.3
40.6 52.3 ✓

157.7
229.8 72.1 ✓
124.4 ✓ −1.10 ✓

338.2
51.4 73.2 ✓ −1.09 ✓

169.2
221.1 51.9 ✓
117.1 ✓ −1.02 ✓

Mean −1.14 ✓

Gen. " −1.15 ✓

9 36 25

9 46 0
02 25.1 ✓
9 41 12.5 ✓
+5 −54.5 ✓
14 40 18.1 ✓
α 423.6113 ✓

S.T 12 25
HA −4 51
Dec. 32.3
P.A 220.8 Vernier B
Sprocket -5.5 B, -4.5 lo.

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1909phae.proj...599W

April 26, 1909.

Double Stars (New List) - Burnham's cat 6422

13 7 -18.2
12 47 Wells Rowe Rec
0 20
11 43 Phot W.

P.A. 340 Dist 7" Mags

Index Rta A.

348.4
63.4 7V.0 v
165.0
245.9 R0.9 v
1VV.9 v 0.46 v

18 21 20

346.0
70.2 R4.2 v 0.40 v
168.0
245.9 77.9 v
162.1 v 0.34 v

Index Lt B B.

260.1
328.5 6R.4 v
71.0
157.6 R6.6 v
1VV.0 0.42 v

251.2 R6.3 v 0.44 v
337.5
78.2
151.0 72.R v
1V9.1 0.40 v
Mean 0.42

10 32 10
V3 30. v
10 26 KV. v
+V -V4. v
1V 2V V1. v
R423.6430 v

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1909phae.proj..596W

April 26, 1909.

The above group was not taken to be used. It was simply made to see how close stars photometer W. would handle and also to try a somewhat higher eyepiece which has a Nichol already in front of it. It is found that it will be necessary to change the prisms over into Phot. R in order to measure quite close doubles as even these components do not reverse well over each other.

Seeing in above group abominable. All four images a confused blur about all the time. Settings very uncertain.

W's watch used for times.
Watch 54 secs fast.

L. P. P.

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1909phae.proj..590W

April 28, 1909 (Wednesday)

R U Monocerotis

6	50	-8.0
10	20	U. Obs. Bouw Rec.
3	30	

Star b precedes star a by 8.5 secs. and is 7.'8 south of it

Star c precedes star a by 8.8 secs. and is 12.'2 south of it

Star d precedes star c by 5.0 secs. and is 5.'9 south of it

Star e precedes star d by 25.2 secs and is 14.'0 south of it

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1909phae.proj..596M

April 28, 1909

R T. Aurigae = 48 Aurigae = Asbury is Var.

6	19	+30.6
10	49	W. Obs. Rowe Ree. Phot T.
4	30	9.5 in cap. used

8 12 55

Index L+B B.

271.3
300.0 28.7
93.8
114.9 21.1 / 49.8 −3.2 v

275.2
297.1 21.9 −3.13 v
86.1
121.2 35.1 / 57.0 −2.9 v

Index R+A A

176.2
214.5 38.3
3.0
25.5 22.5 / 60.8 −2.83 v

186.2 21.3 −2.87 v
207.5
355.2 37.3
32.5 / 58.6 −2.91 v
Mean −3.00 v

8 21 35

3 K 30. v
A 1 7 1 5. v
+5 −10. v
13 17 5. v
A425. 5 v 36 v

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1909phae.proj..596W

April 28, 1909.

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1909phae.proj..596M

April 28, 1909.

B+b 1182 — B 394

8	39	58.8	8	40	0.0
8	40	58.7	8	41	0.0

Reapp. Jupo. III. Phot W. W. Obs. Bowe Rec.
Compared with nearer (to planet) of two Sats on preceding side = Sat.

			8	49	2			Fake Alarm.
				51	16			" "
13	√2	34.√		52	32			Suspected
13	√3	20.√		53	18			Probably Seen.
13	√3	40.√		53	38			Certainly Seen.
13	√4	43.√		54	41	43.0√	+2.0√	111.0
13	√4	√9.√		"	57	√6.1√	+1.4√	154.0
13	√√	12.√		55	10	61.2√	+1.1√	97.9
13	√√	27.√		"	23	√6.6√	+1.3√	159.1
13	√√	39.√		"	37	62.0√	+1.1√	102.5
13	√√	√√.√		"	52	60.√√	+0.0√	164.5
13	√6	0.√		56	5	70.7√	+0.7√	96.0
13	√6	22.√		"	19	71.7√	+0.7√	166.7
13	√6	36.√		"	33	73.9√	+0.6√	95.0

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1909phae.proj..596M

April 28, 1909

13	√6	49.	8	-56	46	69.A	+0.A	168.9
13	√7	A.		57	5	74.7	+0.6	99.1
13	√7	29.		"	26	A7.√	+0.1	173.8
13	√7	3A.		"	35	90.7	0.0	86.8
13	√A	1.		"	58			177.0
				58	11	9√.√		84.5
13	√A	32.		"	25	100.0		180.0
		+3.		"	39	97.A	-0.3	84.0
13	√A	35.		"	55			184.0
				59	8	101.0		82.0
13	√9	27.		"	20	104.6		183.0
		+3.		"	33	102.A	-0.√	79.5
13	√9	30.		"	47			184.1
				"	56	106.√		78.0
14	0	1A	9	0	9	106.6		184.5
		+3.		"	28	106.3	-0.6	79.0
14	0	21.		"	41			185.1
				1	1	110.3		78.2
14	1	20.		"	16	109.7		188.5
		+3.		"	26	110.0	-0.A	78.1
14	1	23.		"	38			187.8
				"	56	111.√		75.5
14	2	16.		2	9	110.4		187.0
		+3.		"	17	111.0	-0.A	77.7
14	2	19.		"	40			188.1
				"	53	109.9		77.5
14	3	14.		3	6	109.7		187.4
		+3.		"	23	109.A	-0.A	77.1
14	3	17.						

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1909phae.proj..596M

April 28, 1909.

			9	3	36		186.8	
				"	48	102.√	78.0	
14	4	10		4	2	109.2	186.5	
		+3.		"	17	109.2 −0.7	77.0	
14	4	13.		"	31		186.8	
				"	46	109.7	77.1	
14	√	2.		5	2	112.1	186.8	I
		+3.		"	14	110.9 −0.2	75.8	
14	√	11.		"	28		187.9	
				"	41	112.4	75.8	
14	6	2		"	52	109.√	188.2	II
		+3.		6	9	111.0 −0.2	77.5	
14	6	√.		"	28		187.0	
				"	37	110.7	76.8	
14	6	√2.		"	51	110.√	187.5	III
		+3.		7	4	110.6 −0.2	76.4	
14	7	1.		"	20		186.9	
				"	34	110.√	77.0	
14	2	0.		"	51	111.1	187.5	IV
		+4.		8	10	110.2 −0.2	75.9	
14	2	4.		"	24		187.0	
				"	38	112.1	76.2	
14	9	9		9	3	111.7	188.3	V
		+4.		"	22	111.9 −0.9	76.2	
14	9	13.		"	34		187.9	
				"	49	111.0	77.0	
14	10	10.		10	2	112.√	188.0	VI
		+4.		"	20	111.2 −0.2	75.5	
14	10	14.		"	31		188.0	

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1909phae.proj..596W

April 28, 1909.

			9	10	59	112.0	75.5	
14	11	24		11	18	111.2	187.5	
		+4.		11	29	111.6 −0.4	75.8	XII
14	11	28.		11	50		187.0	
				12	1	111.8	76.1	
14	12	28.		11	16	111.4	187.5	VIII
		+4.		11	41	111.4 −0.0	75.8	
14	12	32.		11	53		187.2	

Limit of visibility.

			11	13	40	30.1	116.5	
14	14	3	11	13	55	29.1	147.0	
		+4.	11	14	9	30.0 +2.9	118.0	
14	14	7.	11	14	28		147.5	

Seeing fairly good.

Owing to troublesome ghosts and necessary adjustment of images, (the comparison Sat. lay moderately near Jupiter) a little delay was necessarily occassioned in getting first setting

	B + C.	1182.	B. 394.		
9	23	55.2	9	24	0.0
9	24	55.0	9	25	0.0

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1909phae.proj..596W

April 28, 1909.

α Herculis compared with dd 6.8.

17	12	+33.2
12	17	W Obs. Power Rec. Phot I
4	55	
7	5	9.5 m cap used

Index Left B. I

355.2 ← Var dis.
33.3 34.1 v
1805
209.9 29.6 v
67.5 v −2.59 v

1.6 30.5 v −2.50 v
32.1
174.5 42.1 v
216.6 72.6 v −2.42 v

Index Right A.

~~267.8~~ 86.1 36.2 v
~~303.5~~ 122.3
92.8 271.1 27.7 v
116.5 298.8 63.9 v −2.72 v

272.2 24.7 v −2.66 v
300.9
84.6 34.9 v
123.5 67.6 v −2.59 v
Mean −2.58 v

9 31 45
96 30.1 v
9 42 1.5 v
+5 −10.1 v
14 42 5.5 v
842 5.5 616 v

9 44 45

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1909phae.proj...596

April 28, 1909.

Same Again II

Index Right A.

9 53 15

266.5
306.0 39.5 v

89.8
117.8 28.0 v
67.5 v — 2.5 9 v

271.8 28.8 v — 2.5 8 v
300.6

84.4 39.6 v
124.0 64.4 v — 2.5 6 v

Index Left B.

173.9 40.5 v
214.4

1.2 27.7 v
28.9 64.2 v — 2.5 7 v

182.3 27.3 v — 2.5 0 v
209.6

351.8 44.6 v
36.4 71.9 v — 2.5 4 v

10 0 0
113 15. v
9 5 6 38. v
+5 — 10. v
14 5 6 28.
42 5. 6226 v

Mean — 2.5 4 v
Gen. " — 2.5 6 v

Somewhat cloudy in first group on Var. As third set in that group seemed to be little abnormal for some reason, that set was retaken.

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1909phae.proj..596W

April 28, 1909.

+33° 2871

Old b S. star compared with new, provisional C S.

U. Obs. Power Ref. Phot T

9.5 in cap. used

Index Above A.

	252.0	Old b.S. Dec	
10 28 45	321.8	69.8 v	
	78.5		
	131.6	53.1 v / 122.9 v	−1.13 v
	260.7	~~48.8~~ v	−1.14 v
	309.5		
	67.2	73.2 v / 122.0 v	−1.15 v v
	140.4		

Index Below B.

	~~158.2~~	338.6	72.7 v
	~~229.9~~	51.3	
	~~351.2~~	169.3	
	~~11.0~~	221.6	123 v / 125.0 v −1.02 v
	~~167.5~~	349.7	
	~~221.2~~	40.1	0.4 v −1.12 v
	~~337.4~~	158.6	
	~~53.0~~	229.6	71.0 v / 121.4 v −1.16 v

Mean −1.13 v

10 35 40

64 25. v

10 32 12. v

+v −10 v

1v 32 2~~8~~. v

~~8425. 6466~~ v

8425. 6472 v

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1909phae.proj..596M

April 28, 1909

Same Again II

Index Below B.

1568

2348 79.0 ✓

350.4

39.3 $\frac{48.9}{126.9}$ ✓ −1.04 ✓

169.0

220.5 81.5 ✓ −1.02 ✓

337.7

54.6 $\frac{76.9}{128.4}$ −1.01 ✓

Index Above A.

70.1

139.5 69.4 ✓

260.1

309.5 $\frac{49.4}{118.8}$ ✓ −1.22 ✓

80.4

130.7 50.3 ✓ −1.20 ✓

249.3

320.1 $\frac{70.8}{121.1}$ ✓ −1.19 ✓

mean −1.11 ✓

Gen. " −1.12 ✓

10 37 45

10 45 45

43 30. ✓

10 41 45 ✓

+5 −10. ✓

45.

10 41 35. ✓

42 5. 6 5 39. ✓

As there seemed to be some trouble in last set of first group on previous page the last half of that group was retaken.

W's watch used for times except in eclipse

Watch 10 secs fast.

L. P. P.

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1909phae.proj..596W

May 3, 1909 (Monday)

R.T. Aurigae = 48 Aurigae = Asthiny's Var.

6	19	+30.6
10	19	W. Obs. Rowe Ree Phot J
4	0	9.5 in cap. used

Index L+B

272.4 < Var. Dis.

7 39 40

299.4

93.9

114.1

276.4

296.4

87.4

119.5

Index R+A

Tried for a long time to get additional observations but clouds prevented

W's watch used for times

W watch 45 secs fast.

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1909phae.proj..596M

May 4, 1909 (Tuesday)

R. T. Aurigae = 48 Aurigae = Astbury's Var.

6 19 +30.6

10 24

4 5

W. Obs. Rous Rec. Phot. T.

9.5 m cap. used.

Index L+B B.

7 41 45

2703 ← Var Dis

301.0 30.7 ✓

93.1

115.9 22.8 ✓ / √3. √ ✓ −3.12 ✓

274.1 23.1 ✓ −3.03 ✓

297.2

86.5 34.7 ✓

121.2 √7.8 ✓ −2.94 ✓

Index R+a A.

176.1 39.3 ✓

215.4

1.0

27.1 26.1 ✓ / 6 √.K ✓ −2.66 ✓

182.4 26.6 ✓ −2.66 ✓

209.0

355.7 34.7 ✓

34.4 6 √.3 ✓ −2.67 ✓

Mean −2.84 ✓

7 50 55

92 40. ✓ S.T. 11 8

7 46 20. H.A +4 42

+5 −34. Dec +30.9

12 47 46. P.A 282.5 Vernier B

8431.√318 Sprocket −9.5 B, −8.56.

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1909phae.proj..596M

May 4, 1909.

In first half of preceding group, twilight rather strong and observations somewhat difficult but great care exercised.

Fourth Type Star +59° 2810

0	2	+58.3
11	12	W. Obs. Rowe Rec.
11	10	

Abandoned. Too low in bright moonlight.

W Herculis compared with old b.s.

17	12	+33.2
11	12	
6	0	
6	0	

W. Obs. Rowe Rec. Phot. 7.

9.5 m cap. used

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1909phae.proj..596W

May 4, 1909.

Index Left. B. I

350.9 ← Var Dis.		
40.0	49.1	
175.6		
215.0	39.4	−1.9
	44.5	
3564	37.6	−1.44
34.0		
167.7	36.0	
223.7	93.6	−1.42

Index Right A.

261.7	47.8	
309.5		
86.0	38.4	
124.4	46.2	−2.02
266.6	38.8	−2.02
305.4		
80.0	46.9	
126.9	46.7	−2.03

mean = 1.97

8 30 20

8 36 50

67 10.

433 35.

+ −34.

13 33 1.

443.1 − 229

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1909phae.proj..596M

May 4, 1909.

Same Again. II

Index Right. A.

8 38 50

262.6
308.5 45.9 ✓
84.4
122.4 32.0 ✓ / ∠ 3.9 ✓ — 2.0∠ ✓

267.6
304.4 36.∠ ✓ — 2.0∠ ✓
81.2
128.0 46.∠ ✓ / ∠ 3.6 ✓ — 2.0 9 ✓

Index Left. B.

166.4 ∨∨.6 ✓
222.0
353.0
38.2 45∨.2 ✓ / 100.∠ ✓ — 1.6 4 ✓

174.0
219.1 45∨.1 ✓ — 1.72 ✓
351.1
40.0 44.9 ✓ / 94.0 ✓ — 1.∠1 ✓

Mean — 1.90 ✓
Gen. " — 1.92 ✓

8 47. 40
∠ 6 30. ✓
∠ 43 15. ✓
+∨ -34. ✓
13 42 41. ✓

∠431.∨713 ✓

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1909phae.proj..590W

May 7, 1909

+33° 2871

Old b.S. compared with new provisional b.S.
W. Abs. Rows Rec. Phot T.
9.5 m cap. used

Index Above A.

73.1	← Old b.S. Dis.	
140.0	66.9 v	
262.2	~~67.2~~ v	
308.0	112.7 v	−1.36 v
78.1	~~v~~2.9 v	−1.32 v
131.0		
253.0	62.6 v	
315.6	11 ~~v~~.~~v~~ v	−1.29 v

Index Below A.

337.4		
49.4	72.0 v	
166.8	~~v~~3.2 v	
220.0	12~~v~~.2 v	−1.02 v
347.8	~~v~~.~~v~~.1 v	−1.06 v
42.9		
157.7	72.3 v	
230.0	127.4 v	−1.03 v
		Mean −1.19 v

9 4 35

9 11 45

16 20. v

9 ~~2~~ 10. v

+~~v~~ −34. v

14 7 36 v

~~2~~431. ~~v~~~~2~~06 v

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1909phae.proj..596W

May 4, 1909.

Same Again II

Index Below. B.

339.8
49.7 10.7 v
169.0
219.9 v0.9 v
121.6 v -1.16 v

349.1 v3.1 v -1.10 v
42.2
156.2
230.0 13.8 v
126.9 v -1.04 v

Index Above A.

252.5 6v.v v
318.0
81.1
129.2 48.1 v
113.6 v -1.34 v

261.0 48.0 v -1.32 v
309.0
70.9
138.2 67.3 v
11v.3 v -1.30 v

Mean -1.21 v
Gen. " -1.20 v

9 13 50

9 21 40
3v 30. v
9 .17 4v. v
+v -34. v
14 17 11. v
Δ431. v9v2 v

S.T. 12 34
H.A. -4 42
Dec +32.2
P.A. 38.7 Vernier B.
Sprocket. -65B, -55.6

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1909phae.proj..596W

May 4, 1909.

Fourth Type star +38° 1539.

6 27 +38.5

12 47 W Obs Bowe Rec. Phot T

6 20 9.5 in cap.

Index Lt A B.

270.8 ← Fourth Type Dis.

301.3 30.5 ✓

94.2

117.5 23.3 ✓ / √3.2 ✓ −3.11 ✓

274.4 24.3 ✓ −3.14 ✓

295.7

89.2 31.0 ✓

120.2 / √2.3 ✓ −3.17 ✓

Index R+B A.

178.0 32.2 ✓

210.2

3.4 22.4 ✓

25.8 / √4.6 ✓ −3.07 ✓

184.0 23.4 ✓ −3.12 ✓

207.4

1.6 20.8 ✓

30.4 / √2.2 ✓ −3.17 ✓

Mean −3.13 ✓

9 50 15

9 56 25

6 40. ✓

9 √3 20. ✓

+√ −34 ✓

14 √2 46 ✓

∠431.6200

S.T. 13 11

H.A. 6 39

Dec +39.0

P.A. 193.0 Vernier 8

Sprocket. −9.5B, −8.5G

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1909phae.proj..596W

May 4, 1909.

Double Star (New List) = Burnham's Cat. 4723

8	35	+49.3
13	30	W. Obs. Rouse Pec. Phot 10.
4	55	P.A. 331° Dist 10"

Index Below

	270.4 ← South, Foll. Brt. dis.		
10 25 50	353.4	Δ 3.0 v	
	91.0		
	174.9	Δ 3.9 v	
		166.9 v	0.2 v v
	268.0	Δ 6.4 v	0.20 v
	354.4		
	90.0		
	175.0	Δ 7.0 v	
		171.4 v	0.16 v

Index Above

	181.4	Δ 1.2 v	
	262.6		
	359.9		
	833	Δ 3.4 v	
		166.6 v	0.29 v
	182.0	Δ 2.0 v	0.26 v
	264.0		
	359.4		
	84.6	Δ 7.2 v	
		167.2 v	0.24 v

Mean 0.23 v

10	30	20
	7 6	10. v
10	24	7. v
+v		−34. v
1v	27	31 v

Δ 431.6 441 v

Obs watch used for times
Watch 34 secs fast.

L. P. P.

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1909phae.proj...596W

May 5, 1909. (Wednesday)

R.T. Aurigae = 48 Aurigae - Astbury's Var
6 19 +30.6
10 29 W. Obs Rous Rec. Phot T
4 10 9.5 in cap used

Index L+B B.
86.9 ✓ Var Obs.
120.8 33.9 ✓
2732
298.6 $\frac{27.7}{\sqrt{9.3}}$ ✓ −2.99 ✓

92.9 23.1 ✓ −2.90 ✓
116.0
267.3 $\frac{3\sqrt{7}}{\sqrt{8.8}}$ ✓ −2.91 ✓
303.0

Index R+a A.
352.8 43.2 ✓
36.0
181.1 $\frac{27.8}{7\ 1.0}$ ✓ −2.47 ✓
208.9

2.2 27.0 ✓ −2.48 ✓
29.2
172.9 $\frac{43.3}{7\ 0.3}$ ✓ −2.70 ✓
216.2
Mean −2.69 ✓

7 47 15

7 55 50
103 ✓
7 ✓1 32. ✓
+✓ +1 16.
12 ✓2 48. ✓
£432. ✓36 ✓

S.T. 11 16
H.A. +4 50
Dec. +30.9
A 282.5 Vernia B.
Spocket −10.5 B, −9.5 b.

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1909phae.proj..596W

May 5, 1909

During the middle of last evening the track of phot. was thoroughly oiled up. For several days before this the prisms have moved very hard up the track causing the links of the chain to jump at times on the gear. Tonight (since the oiling) the prisms move very easily on the track but due to the fact that the track was not oiled until after the preceding variable was not taken last night, the sprocket tonight reads differently than it did last night and is liable to vary on previous nights on different objects

α Herculis compared with old 6.8

17	12	+33.2
11	27	
5	45	
6	15	

W. Obs. Power Rec. Phot T

9.5 m exp. used.

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1909phae.proj..596W

May 5, 1909.

Index Left. B. I

8 27 30

172.1 ← Var Dis
218.5 46.K ✓
358.0
31.4 33.K ✓ / 79.A ✓ −2.20 ✓

178.8
212.5 33.7 ✓ −2.22 ✓
352.6
37.6 47.0 ✓ / 70.7 −2.23 ✓

Index Right A.

83.5
124.3 40.0 ✓
271.2
299.1 27.9 ✓ / 68.7 ✓ −2.17 ✓

90.8
119.8 29.0 ✓ −2.12 ✓
265.1
316.3 41.2 ✓ / 70.2 ✓ −2.10 ✓

mean − 2.37 ✓

8 34 40
62 10.
α 31 ✓.
+✓ 1 16.
13 32 21.
α 432.✓642

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1909phae.proj..596M

May 5, 1909.

Same Again II

Index Right. A.

85.0
124.1 39.1 v
271.0
299.4 28.4 v
67.4 v -2.79 v

89.9 28.8 v -2.76 v
118.7
266.1 40.7 v
306.8 69.4 v -2.72 v

Index Left. B.

352.8 44.4 v
37.2
179.0 32.2 v
211.2 76.6 v -2.30 v

358.7 31.7 v -2.32 v
30.4
174.0 43.8 v
218 75.5 v -2.33 v
Mean -2.44 v

8 39 35

8 46 5

A 28 40.v
A 42 70.v
+v 1 16.v
13 44 6.v

A432.v723 v

1909phae.proj...596W

May 5, 1909

Same Again III

Index Left. B.

354.4 42.1 v
36.5

178.6 30.9 v
209.5 73.0 v — 2.41 v

358.4 32.4 v — 2.32 v
30.8

173.8 42.0 v
215.8 75.4 v — 2.36 v

Index Right A.

265.4 39.8 v
305.2

89.7 28.8 v
118.5 68.6 v — 2.22 v

269.6 31.8 v — 2.24 v
301.4

85.4 37.8 v
123.2 69.6 v — 2.22 v

Mean — 2.26 v

8 52 0

9
4 0 5
112 v. v
42 v 6 2. v
+v 1 16. v
1374 v7 18.
~~42 32.6 3 4 v~~
42 32. v8 14 v

1909phae.proj..596M

May 5, 1909.

Obs. Jups. III Phot W. 26 Ab. Rows Rec

Compared with nearest of three Sats. on preceding side = Sat. IV.

14			9.	15	58	104.5		79.5	
14	16	24.		16	18	105.6		184.0	1
	+1	16.		"	39	105.0	−0.6	78.9	
14	17	44.		"	59			184.5	
				17	21	104.3		79.9	
14	17	54.		"	44	104.9		184.2	
	+1	16.		18	4	104.6	−0.6	79.1	2
14	19	10.		"	26			184.0	
				19	4	105.9		78.9	
14	19	30.		"	24	105.3		184.8	3
	+1	16.		"	52	105.6	−0.6	79.7	
14	20	54.		20	13			185.0	
				"	44	104.9		79.0	
19	21	14.		21	6	104.7		183 9	4
	+1	16.				104.8	−0.6		
19	22	34.							

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1909phae.proj..596W

May 5, 1909

	9	21	25			79.5
		"	57			184.2
		22	42	105.3		78.9
14 23 13.		23	2	104.6		184.2
+1 16.		"	24	105.0	−0.6	79.7
14 24 29.		"	44			184.3
		24	10	104.2		80.0
14 24 [illegible]		"	35	104.4		184.2
+1 16.		"	59	104.3	−0.1	79.6
14 26 1.		25	15			184.0
		"	35	103.4		80.1
14 25 59.		"	49	102.6		183.5
+1 16.		26	8	103.0	−0.5	80.2
14 27 15.		"	24			182.8
		"	44	103.0		80.5
14 27 13.		27	4	102.2		183.5
+1 16.		"	22	102.6	−0.1	81.0
14 28 29.		"	41			183.2
		"	58	101.6		81.4
14 28 23.		28	14	101.1		183.0
+1 16.		"	31	101.4	−0.4	81.5
14 29 39.		"	50			182.6
		29	15	100.2		81.8
14 29 44.		"	30	97.4		182.0
+1 16.		"	56	98.8	−0.3	83.4
14 31 0.		30	14			180.8
		"	31	99.7		82.8
14 30 53.		"	45	98.7		182.5
+1 16.				99.2	−0.4	
14 32 9.						

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1909phae.proj..596M

May 5, 1909.

9	31	0			828	11	
	"	17			181.5		
	"	44	99.1		82.7		
14 32	32	0	94.1		181.8		
+1 16.	"	18	94.6	−0.3	82.9	12	
14 33 24.	"	31			181.0		
	"	49	94.4		83.1		
14 33 19.	33	8	94.2		181.5		
+1 16.	"	32	94.6	−0.3	83.7		
14 34 35.	"	46			182.5		
	34	9	94.5		83.0		
14 34. 37.	"	23	97.7		181.5		
+1 16.	"	50	94.1	−0.3	83.4		
14 35 53	35	6			181.1		
	"	22	94.3		83.0		
14 35 50.	"	40	95.0		181.3		
+1 16.	36	1	96.6	−0.3	84.0		
14 37 6.	"	18			179.0		
	"	32			84.1		
14. 36 56.	"	47	95.9		180.0		
+1 16.	37	3	92.5 / 94.2	−0.2	85.0		
14 38 12.	"	21			177.5		
	"	40	87.7		86.1		
	"	58	83.3		173.8		
14 38 4.	38	12	85.5	+0.2	89.5		
+1 16.	"	28			172.8		
14 39 20.	"	42			92.0		

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1909phae.proj..596W

May 5, 1909.

14 39	6.	9	38	57	79.2		172.2
+1	16.		39	15	76.4		93.4
14 40	22.		"	28	77.4	+0.5	169.8
			"	45	70.4		94.7
14 40	8.		40	0	64.7		165.5
+1	16.		"	16	67.4	+0.9	99.5
14 41	24.		"	29			164.2
14 42	7.		"	51	76.0	+1.4	104.0
14 42	18.		41	2	73.5	+1.5	160.0
14 42	36.		"	20	70.7	+1.6	106.5
14 42	48.		"	32	67.2	+1.4	157.2
14 43	3.		"	47	64.0	+2.0	110.0
14 43	17.		42	1	60.2	+2.2	154.0
14 43	34.		"	22	53.3	+2.5	113.8
14 43	50.		"	34	29.6	+2.9	149.1
14 44	9.		"	53	26.0	+3.0	119.5
14 44	20.		43	4	26.5	+3.1	147.5
14 44	37.		"	21	24.9	+3.3	121.0
14 44	45.		"	29			145.9
14 44	59.		"	43			Suspected
14 45	20.		44	4			Not seen

Limit of Visibility

		9	46	45	14.5		123.0
14 47	9.	9	47	9	17.9		141.5
+1	16.	9	"	23	14.2	+4.0	123.0
14 48	25.	9	"	38			140.9

Seeing pretty good. Moon at full, some moisture. over

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1909phae.proj..596M

May 5, 1909.

(and tending to haze) in the sky.

From lack of home, W's watch was used for times on eclipse. Watch running closely.

Watch 1 min 16 secs slow

w Herculis again compared with old G.C.

17	12	+33.2
13	12	
4	0	
8	0	

W. Als. Bruce Rec. Phot. T.

9.5 in cap used.

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1909phae.proj..596W

May 5, 1909.

Index Left D. IV

176.2 ← Var Dist

215.3 39.1 v

358.9 33.7 v

32.6 72.8 v −2.42 v

178.1 35.5 v −2.42 v

213.6

356.0 37.6 v

33.6 73.1 v −2.41 v

Index Right A.

86.4 36.3 v

122.7

268.7 33.3 v

302.0 69.6 v −2.52 v

87.4 32.5 v −2.52 v

119.9

267.6 36.9 v

304.5 69.4 v −2.53 v

Mean −2.467 v

10 11 25

10 19 50

31 15.

10 15 30.

+5 1 16.

15 16 54 v

+432.6367 v

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1909phae.proj..596W

May 5, 1909

Same Again. I

Index Right. A.

86.4		
1235	37.1	
10 26 0		
268.6		
301.4	32.8	
	69.9	−2.71
87.4	36.0	−2.49
123.4		
267.9		
303.0	35.1	−2.47
	71.1	

Index Left B.

355.8		
35.4	39.6	
174.9		
214.1	39.2	
	78.8	−2.23
356.2	34.1	−2.27
34.3		
175.2		
213.4	34.2	−2.31
	76.3	

Mean − 2.34

10 · 33 15

√9 15.

10 29 34.

+√ 1 16.

1√ 30 √4.

£432.6464

S.T. 13 48

H.A. −3 28

Dec +32.6

P.A. 132.9 Vernier B

Sprocket −10.5B, −9.5b

W's watch used on all objects throughout evening.

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1909phae.proj..596W

May 5, 1909.

Troubled more or less throughout evening by fog, somewhat poor atmospheric conditions and some light cloud

L. P. A.

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1909phae.proj..596W

May 6. 1909. (Thursday).

R T Aerogae
6 19 +30.6
11 3 W. Abs Rous Rec. Phot T
+4 44 9.5 in cap used

Index Lt B B.
273.6 ← Var dia
296.3 22.7 ✓
96.8
112.0 15.2 ✓ −3.89 ✓
37.9 ✓

278.0 16.4 ✓ − 3.73 ✓
294.4
90.6 27.3 ✓
117.9 43.7 ✓ 3.57 ✓

Index Rt a A.
179.0 29.4 ✓
208.8
5.7 14.7 ✓ −3.34 ✓
24.4 44.1 ✓

185.8 19.0 ✓ −3.36
204.8
1.0 26.9 ✓
29.9 47.9 ✓ −3.37 ✓
Mean − 3.54 ✓

8 8 15

8 16 35
24 50. ✓
2 12 25. ✓
+v +11 ✓
13 12 36. ✓
A433.5 ✓ 0K ✓

Sprocket etc not read for lack of time but region thoroughly identified.

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1909phae.proj..596W

May 6, 1909.

η Herculis compared with old b.d.

17	12	+33.2
11	47	W. Obs. Rouse Res. Phot. T.
5	25	9.5 in cap. used.
6	35	

Index left B. I

347.5 Var Dis.
39.7 ∨27.∨
178.8
211.4 $\frac{32.6}{\Delta 4.\Delta}$ −2.06

357.4 36.1 −1.96
33.5

167.7 ∨6.2
223.9 $\frac{}{92.3}$ −1.Δ∨

Index Right A.

258.9
310.5 ∨1.6

88.6
120.8 $\frac{32.2}{\Delta 3.\Delta}$ −2.0Δ

268.4 31.1 −2.0Δ
303.5

78.0
129.2 $\frac{∨1.2}{\Delta 6.3}$ −2.01 −2.00
mean −1.99

8 37 20

8 46 15

Δ3 3∨.
Δ 41 4Δ.
+∨ +11.
13 41 ∨9.

Δ433.∨70Δ

1909phae.proj..596W

May 6, 1909.

Same Again II

Index Right A.

261.6		
311.3	49.7 ✓	
87.4		
121.5	34.1 ✓	
	A3.A ✓	−2.0A ✓
267.6		
301.6	34.0 ✓	−2.10 ✓
79.7		
1283	48.6 ✓	
	A2.6 ✓	−2.12 ✓

Index Left B.

168.7		
220.4	√1.7 ✓	
356.7		
34.8	3A.1 ✓	
	A9.A ✓	−1.92 ✓
177.0		
216.6	39.6 ✓	−1.A9 ✓
348.2		
40.5	√2.3 ✓	
	91.9 ✓	−1.A6 ✓

Mean − 2.00 ✓

9 8 25

9. 11 50

1√ 1√. ✓

9 7 3A. ✓

+√ +11. ✓

14 7 49. ✓

A433. √AAA ✓

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1909phae.proj..596M

May 6, 1909.

Same Again III

Index Left - B.

169.4
220.2
352.1
37.5

+0.2
+5.4
96.2
-1.75

173.2
214.6
348.0
41.4

+1.4
+3.4
94.2
-1.77
-1.79

Index Right A.

80.2
129.9
268.8
305.8

+9.7
+7.5
47.2
-1.99

86.8
122.6
262.7
306.8

+35.8
+44.1
79.9
-2.10
-2.20
mean -1.94

9 24 55

9 34 0

+2 +5.
9 29 20.
+5 +11.
14 29 31.
4433.6039

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1909phae.proj..596W

May 6, 1909.

Same Again IV

Index Right. A.

80.6		
127.1	46.5	
263.3		
305.9	42.6 / 89.1	−1.9K

82.6		
122.3	39.7	−1.9K
263.6		
310.0	46.4 / 86.1	−2.02

Index Left. B.

349.9		
39.4	49.5	
173.8		
216.8	43.0 / 92.5	−1.85

352.6	44.8	−1.80
37.4		
170.4		
221.3	50.9 / 95.7	−1.76

Mean −1.89

9 44 38

9 51 50

96 20.

9 48 10.

+5 +11.

14 48 21.

2433.6170

1909phae.proj..596M

May 6, 1909

Same Again

Index Left. B.

350.1
40.3 +0.2
173.6
218.3 44.7 / 44.6 −1.79

351.9
37.9 46.0 −1.70
171.4
220.4 49.0 / 49.0 −1.70

Index Right A.

265.0
307.7 42.7
84.4
124.7 40.3 / 43.0 −2.11

266.0
304.5 38.5 −2.12
82.2
125.5 43.3 / 41.5 −2.14

Mean = −1.91

10 0 0

10 9 10

9 10.

10 4 3

+11.

46.

4433.62 4

1909phae.proj..596W

May 6. 1909

+38° 2871

Add b.s. with new provisional b.s.

W Abs Rouse Rec. Phot T

9.5m cap used.

Index Above A.

	75.0	← Old b.s. Dec	
10 14 15	135.4	60.4 v	
	260.0		
	309.0	49.0 v	
		109.4 v	−1.43 v
	80.2		
	128.9	48.7 v	−1.32 v
	253.9		
	319.1	65.2 v	
		113.9 v	−1.33 v

Index Below B.

	340.6	62.6 v	
	49.2		
	167.4		
	219.1	51.7 v	
		120.3 v	−1.19 v
	349.7	51.9 v	−1.19 v
	41.6		
	160.8	62.2 v	
	229.0	120.1	−1.19 v

mean −1.24 v

L. A. P.

10 21 0

3v 1v v

10 17 32. v

+v +11. v

1v 17 49. v

+433.6374 v

ST 13 38

HA −3 39

Dec +32.3

DA 298. Runner B

Sprocket −7.5 − 65B, − 6Pb

W's watch used for time. Watch 11sec slow.

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1909phae.proj..596W

May 8, 1909. (Saturday)

R.T. Aurigae = 48 Aurigae = Astbury's Var.
6 19
10 49
4 30
+30.6

20 Obs. Power Rec. Phot T.
9.5 in cap. used

Indep 48 B.
269.2 ← Var 2 D
303.8 34.6
93 4
116.2 22.8 / 7.8 −2.96

273.7 22.9 −2.94
296.6
87.3 31.9 / 8.8 −2.91
123.2

Indep R+A. A.
172.6 42.6
215.2
1.2
29.0 27.8 / 10.4 −2.49

181.7 27.3 −2.52
209.0
354.2 41.3 / 6 8.6 −2.55
355.5
Mean −2.73

53 55

8 3 25
117 20
7 8 40
+5 +1 11
12 9 1.
8.T 11 34
H.A +5 9
Dec +30.9
P.A. 281.8 Vernier B
Sprocket −10.5 B, −9.5 b.
£43 5. 416

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1909phae.proj..596W

May 8, 1909.

ζ Herculis compared with old B.S.

17	12	+33.2
11	37	W. Abs. Prism Rec Phot I
5	35	
6	25	9.5 in cap. used.

8 26 20

Index Left B. I

171.9	← Var. Obs.	
222.8	50.9	
359.4		
28.5	29.1	
	30.0	−2.19

180.2		
211.1	30.9	−2.20
350.0		
38.6	48.6	
	79.2	−2.21

Index Right A.

91.8		
118.3	26.5	
263.6		
308.9	45.3	
	71.8	−2.45

79.4		
126.2	46.8	−2.39
271.4		
300.0	28.6	
	75.4	−2.33

Mean − 2.30

8 33 25

	59	45
4	29	52
+5	+1	11.
13	31	3.

443 . 532

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1909phae.proj..596M

May 8, 1909.

Same Again. #

Index Right A.

89.5
120.2 30.7 ✓

263.9
311.2 47.3 ✓
78.0 ✓ −2.2 ✓ ✓

78.8 46. ✓ ✓ −2.30 ✓
125.3
271.0
299.8 28.8 ✓
73.3 ✓ −2.34 ✓

Index Left. B.

349.9 49.2 ✓
39.1
179.1 32.7 ✓
211.8
41.9 ✓ −2.14 ✓

359.0 33.6 ✓ −2.10 ✓
32.6
169.1 71.2 ✓
220.3 44.8 ✓ −2.06 ✓
mean −2.20 ✓

8 44 40

8 52 45
97 2 ✓
40 42 ✓
+ ✓ +1 11. ✓
13 49 73. ✓
43 ✓. ✓ 76 ✓

1909phae.proj..596W

May 8, 1909.

Same Again III

Index Left. B.

348.6
39.1 ∨0.∨ ∨
179.0
213.1 34.6 ∨ / 34.1 ∨ −2.06 ∨

357.4
31.9 34.∨ ∨ −2.02 ∨
168.8
221.6 47.3 ∨ / ∨2.4 ∨ −1.99 ∨

Index Right A.

260.2
310.1 49.9 ∨
89.0
118.8 79.7 ∨ / 29.4 ∨ −2.20 ∨

271.1
301.0 29.9 ∨ −2.23 ∨
82.4
130.4 77.9 ∨ / 44.0 ∨ −2.26 ∨
Mean −2.12 ∨

9 6 35

9 14 15
20 ∨0. ∨
9 10 2∨. ∨
+∨ +1 11. ∨
14 11 36. ∨
443∨. ∨914 ∨

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1909phae.proj..596M

May 8, 1909.

Same Again IV

Index Right A.

259.6 V 0.6 V
310.2

90.2 29.6 V
119.8 Δ 0.2 V −2.19 V

269.4 32.0 V −2.16 V
301.4

78.8 V 0.7 V
129.5 Δ 2.7 V −2.12 V

Index Left. B.

167.0 V 3.9 V
220.9

359.6 32.0 V
31.6 Δ V.9 V −2.03 V

178.6 34.1 V −1.99 V
212.7

347.4 V 4.7 V
72.1 Δ 2.8 V −1.9V V

Mean − 2.02 V

9 24 45

9 31 55
V 6 40. V
9 2Δ 20. V
+V +1 11. V
14 29 31. V
Δ 43V. 6039 V

1909phae.proj..596W

May 8, 1909.

Same Again. I

Index Left. B.

168.0		
	V 4.3 V	
222.3		
357.9	34.4 V	
32.3	42.7 V	-1.9 V V

177.8		
	34.2 V	
212.0		-1.9 V V

346.9		
	V 4.3 V	
412	42.V V	-1.9 V V

Index Right. A.

76.2		
	V 4.2 V	
130.4		
269.2		
	32.3 V	
301.5	46.V V	-2.01 V

88.5		
	32.3 V	-2.03 V
120.8		
257.5		
	V 2.9 V	
310.4	42.2 V	-2.0 V V

Mean -1.99 V

9 42 30

9 51 45

94 1.V

9 47 44. V

+V +1 11. V

14 40 19.

A43V. 6169 V

ST 19 24

HA -3 50

Dec +32.6 V

ΦA 313.5 Rumker ⊙

Sprocket. -10.5 B, -9.5 b.

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1909phae.proj..596W

May 8, 1909.

+33°2871

Old 6.8. compared with New Provisional 6.8
Color 2 with ordinary eyepiece / 40 Obs. Powr Rec. Phot T.
Color 2 in Phot. 9.5 in cap used

Index Above A. I I

73.8
135.0 61.2 ← Old 6.8 Div.
261.7
306.9 45.2 / 106.4 — 1.50

83.1
128.6 45.5 — 1.42
230.0
317.5 67.5 / 113.0 — 1.35

Index Below B.

335.8
51.6 75.8 — 1.13
170.5
217.8 47.3 / 123.1 — 1.13

349.5
40.3 50.8 — 1.14
159.0
230.0 71.0 / 121.8 — 1.15

Mean — 1.28

10 8 45

10 17 15
26 0.
10 13 0.
+5 +1 11.
15 14 11

S.T. 13 46
H.A -3 28
Dec +32.2
PA 218.3 Vernier B
Sprocket = 7.5 A, - 6.5 B, - 6.0 C

α 43 5. 6348

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1909phae.proj..596W

May 8, 1909

Z.'s watch used for times
Watch 1 min 11 sec slow.

L. P. P.

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1909phae.proj...596M

May 10, 1909 (Monday)

R. T. Aurgai = 48 Aurgae = Astbury's Var.

6	19	+36.6
10	54	W Obs. Rough Rec. Phot T.
4	35	9.5 in cap used

54 25

Index Ltd B.

273.2	Var Obs	
298.3	25.1	
95.2		
113.6	18.4 / 43	−3.43

277.1	18.0	
295.1		−3.54
91.6		
118.5	26.9 / 44.9	−3.51

Index Rtd A.

179.4	31.2	
210.6		
2.1	28.2 / 59.4	−2.48
30.3		

178.6	32.4	−2.42
211.0		

6.1	30.3 / 62.7	−2.76
36.4		

Mean −3.12

8 0 0

114 25.

7 57 12

+5 +4.

12 57 16.

2437. 57394

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1909phae.proj..596W

May 10, 1909.

Old b.s. + Nov. provisional b.s.

17	12	+33.2
11	37	W Ob Roux Ref. Phot I
5	35	9.5 in cap used
6	25	

Clouds.

Index Above

69.1

8 41 25 137.1

264.3

309.0

Clouds.

W's watch used for times

Watch 4 secs. slow.

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1909phae.proj..596M

May 11, 1909 (Tuesday)

R. T Aurigae = 48 Aurigae = Ashbury's Variable

6 19 +30.6

10 59

4 40

W. Obs. Power Rec. Phot. T.

9.5 in cap used

Index L+B B.

88.9 Var. Dia

7 55 35 120.0 3.1 v

275.4

296.8 21.4 v / 2.5 v − 3.16 v

93.5 21.4 v − 3.12 v

114.9

269.5 32.8 v / 5.2 v − 3.09 v

302.3

Index R+a A.

357.5 36.3 v

33.8

182.3 24.6 v / 60.9 v − 2.43 v

206.9

3.7 27.6 v − 2.78 v

29.3

8 4 50 174.8 34.2 v / 63.8 v − 2.72 v

0 2v.

A 0 12 S.T. 11 48 213.0

+v −3. v H. A+5 23

13 0 9. v Dec. +30.9

A43A. v41A. P.A 281.9 Vernier B

Sprocket −10.5 A. −9.5 B, −9.0 b.

Region thoroughly scrutinized

Mean. −2.9 v v

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1909phae.proj..596W

May 11. 1909.

ζ Herculis +33°2871

Ald. b.s. compared with New Provisional b.s.

17	12	+33.2
11	57	ζ Ald. Bowa Rec Phot T
5	15	9.5 in cafe used
6	45	

Index above A.

74.0	← Ald b.s. dis.	
134.8	60.8 v	
263.4		
309.7	46.3 v / 107.1 v	−1.49 v

82.4	45.0 v	−1.44 v
127.4		
252.0	66.0 v / 111.0 v	−1.39 v
318.0		

Index Below B.

339.7		
50.8	71.1 v	
170.2		
218.6	48.4 v / 119.5 v	−1.20 v

353.1	46.6 v	−1.19 v
39.7		
157.4	74.2 v / 120.8 v	−1.18 v
231.6		

Mean −1.32 v

8 27 55

8 26 0

63 vv v

A 31 vA. v

+v −3. v

13 31 vv. v

A43A. v63A v

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1909phae.proj..596M

May. 11, 1909.

ζ Herculis compared with Ald. 6.8.

W. Cbs. Bouw Ree. Phot. T

9.5 in caps used

Index left B.

352.8	Var Dis	
35.0	42.2	
182.6		
210.3	27.7 / 69.9	−2.71
358.6	31.6	−2.42
30.2		
174.4	43.5 / 75.1	−2.34
217.9		

Index Right A.

266.8	38.2	
305.6		
92.2	25.4 / 64.2	−2.71
117.6		
272.0	26.4	−2.76
298.4		
87.2	35.2 / 61.6	−2.40
122.4		

Mean −2.59

8 42 50

8 49 40

92 30.

2 46 15.

+5 −3.

13 46 12.

2438.5737

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1909phae.proj..596M

May 11, 1909,

Same again. II

Index Bright A.

264.8		
305.5	40.7 v	
92.5		
117.2	24.7 v / 65.4 v	−2.66 v
272.0		
297.4	25.4 v	−2.74 v
87.1		
123.0	35.9 v / 61.3 v	−2.41 v

Index left B.

172.4	44.1 v	
216.5		
1.2		
27.6	26.4 v / 70.5 v	−2.49 v
182.1	26.9 v	−2.45 v
209.0		
351.9		
38.0	46.1 v / 73.0 v	−2.41 v

Mean −2.60 v

Gen. " −2.60 v

9. 0 20

113 20. v

Δ v6 40. v

+v −3. v

13 v6 37. v

Δ43Δ. v Δ10 v

1909phae.proj..596M

May 11, 1909.

+33° 2871

Old b.S. compared with New Provisional b.S. (again.).
Color 1 in Phot. Indys. Above ✓.
Obs. is almost unclouded 70.8 ← Old b.S. Dis.
9 28 0 to call it color 0. but 137.0 66.2 ✓
color 1, is fully as good. 263.6
306.4 42.8 ✓ / 109.0 ✓ −1.44 ✓

83.2 41.2 ✓ −1.46 ✓
124.4
251.7 66.5 ✓ / 107.7 ✓ −1.47 ✓
318.2

Index Below B.
336.5 71.5 ✓
48.8
170.2 47.2 ✓
217.4 118.7 ✓ −1.22 ✓

350.8 42.1 ✓ −1.18 ✓
38.9
157.1 73.7 ✓ / 121.8 ✓ −1.15 ✓
230.8

mean −1.32
Geo. " −1.32
(See p. 188)

9 35 35
63 35. ✓
9 31 42. ✓
+5 −3. ✓
14 31 45. ✓

2432.60 ✓ ✓ S.T. 13 33
H.A. −3 57
Dec +32.3
P.A. 219.9 Vernier B
Sprocket −7.5A, −6.5B, −6.0C

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1909phae.proj..596W

May 11, 1909.

Double Star (New List) = Burnham's Cat 6857

14	19	-19.4
13	38	Obs. Rowe Ree. Phot V.
0	41	
11	19	

P.A. 296° Dist 35" Mags. 7.2, 7.6

Index R+B A.

272.8 ← South Foll+Brh Obs

10 5 0

349.6	76.8		
92.8			
170.6	77.8		
	154.6	0.49	
271.5	84.4	0.41	
355.9			
92.2	78.2		
170.4	162.6	0.33	

Index Eta B.

182.4	77.0		
259.4			
3.4	77.7		
81.1	154.7	0.48	
182.3	77.6	0.44	
259.9			
2.4	81.0		
83.4	158.6	0.41	

Mean 0.42

10 11 0

	16	0.
10	8	0.
+5		-3.
15	7	57.

8438.6306

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1909phae.proj..596M

May 11, 1909.

Double Star (New List) = Burnham's Cat No 7268

15 22 -8.9
13 52 W. Obs. Rowe Ree. Phot W.
1 30 P. A. 135° Dist 52" Mags. 6.2, 6.9
10 30

Index L+A B.

95.0
168.9 73.9 v
277.4
347.4 70.0 v
143.9 v 0.70 v

97.6 68.7 v 0.72 v
166.3
275.0 72.7 v
347.7 141.4 v 0.7v v

Index R+B A.

4.8
78.4 73.6 v
186.1
257.0 70.9 v
144.5 v 0.62 v

5.4
77.7 72.3 v 0.66 v
183.4
257.6 74.2 v
146.v v 0.64 v
mean 0.69 v

10 31 10
v-6 4v. v
10 2a 22. v
+v -3. v
1v 2a 19. v
a438.6446 v

W. watch used for times
Watch 3 sec. fast.

L. P. S.

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1909phae.proj..596W

May 12, 1909 (Wednesday)

R.T. Aurigae = 48 Aurigae : Astbury's Var.

b	19	+30.6
11	19	W. Obs. Bonn Rec. Phot T
5	0	9.5 in cap. used.

Index L+B B.

	266.2	← Var. Dir.
7 58 0	303 0	36.8 v
	92.9	
	116.6	23.7 v / 60.5 v — 2.48 v
	274.1	23.9 v — 2.43 v
	298.0	
	86.0	37.1 v
	123.1	61.0 v — 2.42 v

Index R+a A.

	173 7	41.7 v
	215.4	
	3.0	24.1 v
	27.1	65.8 v — 2.65 v
	181.7	26.9 v — 2.62 v
	208.6	
	354.8	40.2 v
	35.0	67.1 — 2.60 v

mean − 2.72 v

8	6	55	
	4	vv. v	S.T. 11 49
a	2	2a. v	H.A. +5 24
+5		− 3. v	Dec +30.9
13	2	2v. v	P.A. 281.5 Rimer B
8439. v	434		Sprocket. −10.5 A; −9.5 B; −9.0 B

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1909phae.proj..596M

May 12, 1909.

η Herculis +38° 2871

Old 6 S. compared with New Provisional 6 S.

17 12 +33.2

11 52 W. Abs. Rough Rev. Plot. I

5 20 9.5 in cap. used.

6 40

Index Above A. I

-254.1 ← Old 6 S Dis.

318.5 K.K

82.2

128.2 K6.0 / 110.K -1.41

262.3 K6.6 -1.40

308.9

728 6K.A / 111.K -1.39

137.6

Index Below B.

158.2 71.2

229.4

350.0 K6.9 / 116.1 -1.23

36.9

171.7 K7.K -1.24

219.1

339.9 6.9K / 116.A -1.26

49.8

Mean -1.32

8 26 50

8 35 40

6 2 30.

A 3 1 N.

+ − 3.

13 31 12.

A K39. 6 33

1909phae.proj..596W

May 12. 1909

α Herculis compared with Ald. b.s.
W. the Rowe Ref. Phot. T. 9.5 in cap used

Index Left. B. I

172.3	← Var. Dis
220.0	47.7"
2.2	
29.3	27.1"
	7 E.A" −2.3"

181.6	
210.9	29.3" −2.2"
351.2	
38.6	47.4"
	7 6.7" −2.9"

Index Right A.

86.0	
124.9	38.9"
273.5	
298.2	24.7"
	6 36" −2.3"

92.8	
118.2	25.4" −2.2"
265.4	
303.9	38.5"
	6 3.9" −2.2"

Mean −2.5 2"

8 43 45

8 50 15

9 K 0"
8 47 0."
+5" −3."
13 46 57.4

2439.5743"

1909phae.proj...596

May 12, 1909.

Same again II

Index Right. A.

8 52 50

85.6
124.7 39.1 v
272.4
299.7 27.3 v
66 v − 2.63 v

92.2
118.7 26 v v − 2.62 v
264.8
305.2 40 v
66.9 v − 2.61 v

Index Left. B.

352.8
34.5 41.7 v
181.8
212.6 31.6 v
73.3 v − 2.40 v

359.3
30.6 31.3 v − 2.37 v
172.9
216.9 44.0 v
73 v.3 v − 2.34 v

Mean − 2.50 v
Gen. " − 2.51 v

8 59 45
11 23 v. v
4 v 6. 14. v
tv −3. v
13 v6 1v. v
4439. v40 v

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1909phae.proj..596W

May 12, 1909.

α Herculis.

Ald. b.S. compared with New Provisional b.S

Index Above A.

253.8	← Ald b.S. Dec	
316.5	62.7 v	
833		
127.0	43.7 v	
	106.4 v	−1.v0 v
262.4	46.1 v	−1.v0 v
308.5		
74.7	60.6 v	
1353	106.7 v	−1.49 v

Index Below B.

160.5	62.2 v	
228.7		
347.4	v3.3 v	
40.7	121.v v	−1.16 v
170.1	v0.3 v	−1.17 v
220.4		
340.0	70.3 v	
503	120.6 v	−1.12 v
	Mean	−1.34 v
	Gen. "	−1.33 v

(See p. 19v)

9 12 0

9 19 20

31 20. v

9 1v 40. v

+v −3. v S.T. 13 15

14 1v 37. v H.A. −4 10

α 439. v941 v Dec +32.3

P.A. 219.3 Vermin B.

Sprocket. −7.5A, −6.5B, −6.0b

Ald. b.S. color 2 with ordinary eyepiece.

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1909phae.proj...596W

May 12, 1909.

Double Star (New List) - Burnham's Cat No. 7449

15 52 -19.6
13 22
2 30
9 30 W. Chs. Rowe Rec. Phot W-
P.A. 322° List 20" Mags

Index. L+A
185.8 ✓ South, Foll. + Peter. Div.
2583 72.5 ✓
3585
836 Av. 1 ✓ / 17.6 ✓ 0.43 ✓

9 51 30

179.2 Av. 6 ✓ 0.46 ✓
264.8
7.5 69.1 ✓
766 / 15 K.7 0.44 ✓

Index R+B
93.8 74.4 ✓
172.1
267.6
355.5 Av. 7.9 ✓ / 166.7 ✓ 0.25 ✓

88.7 Av. 5 ✓ 0.30 ✓
174.2
274.6 76.5 ✓
351.1 / 162.0 ✓ 0.34 ✓
Mean 0.32 ✓

10 3 40
11 ✓ 10. ✓
9 ✓ 7 35. ✓
+5 -3. ✓
1K ✓ 7 32. ✓
8K39. 6233 ✓

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1909phae.proj..596W

May 12, 1909,

Double Star (New list) = Burnham's Cat 7575

16 13 -19.8

13 53 W Obs Power Rec. Plot W-

2 20

9 40 P.A. 335° Dist 47" Magn

Index Left.

3.6 ← South, Foll, + Brh Obs

10 25 20

81.4 77.2 ✓

190.8

257.6 66.2 ✓

144.6 ✓ 0.6 ✓

9.8

76.9 67.1 ✓ 0.70 ✓

183.8 76.1 ✓

259.9 143.2 ✓ 0.71 ✓

Index Right

276.7 74.3 ✓

351.0

95.2 71.2 ✓

167.0 146.1 ✓ 0.6 ✓

274.4 72.6 ✓ 0.6 ✓

347.0

96.0 73.9 ✓

169.9 146.5 ✓ 0.6 ✓

Mean 0.67 ✓

10 31 0

√6 20. ✓

10 2 10. ✓

+√ -3. ✓

1√ 2 7. ✓

439.644√ ✓

W's watch used for times

Watch 3 secs fast.

L. A. P.

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1909phae.proj...596

May 13. 1909 (Thursday)

B+6.	1182		B 394		
7	20	29.0	7	20	0.0
7	21	29.0	7	21	0.0

Reap. Jup. II Phot W. W Obs. Roya. Rec. Compared with second Sat. from planet (before eclipse) on foll. side = Sat. III

7	34	25	Cloudy. Sats. invisible in Phot.
	"	"	
7	41	15	Clouds thick. Other Sats barely visible at full brightness occasionly
	"	"	
	"	"	
7	42	55	Cloudy. Jupiter invisible
7	44	3	Other Sats not seen
7	44	26	Jupiter invisible
7	46	14	No Sats visible. Jupiter faintly seen
	"	"	
7	45	35	Jupiter invisible
7	45	58	Jupiter faintly seen.
7	46	49	No Sats. seen
7	47	0	Jupiter practically invisible
7	47	13	Jupiter not seen
7	47	58	Jupiter invisible

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1909phae.proj..596W

May 13. 1909

7	48	20	No Sats seen.
7	"	"	Jupiter faintly seen
7	49	4	Jupiter invisible
7	"	35	" "
7	"	"	No Sats seen.
7	52	15	Sat. II thought to
	"	"	have been seen by
	"	"	momentary thinning of
	"	"	clouds
7	53	15	All Sats momentarily
"	"	"	seen, Sat. II with the rest.
"	"	"	Sat. II apparently at
"	"	"	full brightness

7 55 It is now over ten minutes since theoretical time of reappearance. Practically cloudy all the time so that no settings could be obtained.

Sat. II must be up at full brightness several minutes ago so that observations would not now be desirable even if clouds were clear

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1909phae.proj...596

May 13, 1909.

R.T. Aurgas 48 Aurgas Asbury's Var

5 19 +30.6

11 39 W. Alo: Poor Rec. Thin & T.

5 20 9.5 in cap used

clouds

8 15 Still cloudy

Index L+B J. B. I

275.2 ∠ Var Obs.

8 23 45 296.4 21.2 ✓

89.8 32.1 ✓

121.9 √3.3 ✓ −3.13 ✓

269.8 31.8 ✓ −3.1K ✓

301.6

94.2 21.1 ✓

115.3 √2.9 ✓ −3.1K ✓

Index R+a A.

177.6 36.√ ✓

214.1

3.8

26.6 22.8 ✓ / √9.3 ✓ −2.89 ✓

184.0 22.1 ✓ −2.96 ✓

206.1

358.0 33.4 ✓ / √√.√ ✓ −3.0 K ✓

31.4

Mean − 3.0√ K

8 32 35

√6 20. ✓

A 2A 10. ✓

+√ +10. -

13 2A 20. ✓

A40.√196 ✓

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1909phae.proj..596W

May 13, 1909

Same Again. II

Index Rta A.

178.2
211.5 — 33.3 ✓

4.0
26.2 — 22.2 ✓ / √√.√ ✓ — −3.0K ✓

184.2
207.6 — 23.4 ✓ — −3.02 ✓

358.1
31.4 — 33.3 ✓ / √6.7 ✓ — −2.99 ✓

Index Lt B B.

89.8
119.8 — 30.0 ✓

275.3
295.2 — 19.9 ✓ / 49.9 ✓ — −3.22 ✓

95.6
114.9 — 19.3 ✓ — −3.29 ✓

269.7
299.8 — 30.1 ✓ / 49.4 ✓ — −3.30 ✓

Mean — 3.1√ ✓

8 36 25

8 74 25
20 √0. ✓
A 40 2√. ✓
+√ +10. ✓
13 40 3√. ✓
2440. √692 ✓

8

9

9
+√
14
2

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1909phae.proj...596M

May 13, 1909.

Same Again. III

Index L+B B.

89.7
123.2 33.5 v
276.6
295.0 18.4 / √1.9 v −3.20 v

95.9
115.6 19.7 v −3.22 v
267.9
299.1 31.2 v / √0.9 v −3.24 v

Index R+a A.

0.4
31.3 30.9 v
182.0
204.5 22.5 v / √3.4 v −3.12 v

3.8
24.3 20.5 v −3.14 v
177.9
210.0 32.1 v / √2.6 v −3.16 v
Mean −3.18 v

8 56 35

9 4 15

0 √0. v
9 0 2√. v
+√ +10. v
14 0 3√. v

2440. √837

S.T 12 47
H.A. +6 23
Dec +30.9
P.A 281.8 Vernier B
Region thoroughly identified.

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1909phae.proj..596W

May 13, 1909

+33°2877

U Herculis. Abd B.S. compared with Neis Provisional Cs.

17	12
12	47
4	25
7	35

+33.2

U. Abs. Pour Rec Phot. T.

9.5 in cap used.

Clouds.

Index Above A.

74.0	61.0 v	
135.0		
261.5	44.9 v	
306.4	10 v.9 v	-1.v-1 v

9 55 50

84.5	41.2 v	-1.47 v
126.3		
250.4	67.2 v	
318.2	109.6 v	-1.43 v

Index Below B.

340.2	71.7 v	
51.9		
172.2	47.1 v	
219.3	112.2 v	-1.22 v

351.9	42.7 v	-1.21 v
40.6		
160.6	70.9 v	
231.5	119.6 v	-1.20 v

Mean -1.34 v

10 2 35

11 2 2v. v

9 v 9 12. v

+v +10. v

14 v 9 22. v

2440.6246 v

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1909phae.proj...596W

May 13, 1909.

ν. Herculis compared with Ald. B.S

6 louds.
Stopped by clouds.

W's watch used for times
Watch 10 secs slow

L. P. P.

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1909phae.proj..596W

May. 15. 1909 (Saturday)

W. Herculis. (Region of)
Add. 6.S. +839 3871 compared with New Provisional 6.S

17 12 +33.2
11 17 W. Abs Prov. Rec. Phot T
5 55 9.5 in cap. used
6 5
6 clocks

Index Above A.

74.0
134.3 60.3 v
262.3
307.4 44.1 v / 104.4 v −1.13 v

80.9
128.5 47.6 v −1.44 v
251.5
316.1 64.6 v / 112.2 −1.37 v

Index Below B.

338.7
51.0 72.3 v
171.7
219.6 47.9 v / 120.2 v −1.19 v

350.0
40.5 50.5 v −1.20 v
160.6
229.1 68.5 v / 119.0 v −1.21 v

Mean −1.32 v

8 2 20

8 7 40
10 0. v
2 5 0. v
+5 −27. v
13 4 33. v
2442.5 4442 v

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1909phae.proj...596W

May 15, 1909.

α Hercules. compared with Ald C.S. 9.5 in cap.

Index Left. B.

3533 ← Var. Dis

365 43.2 ᵛ

1813

210.2 20.9 ᵛ / 72.1 ᵛ −2.44 ᵛ

359.6 30.9 ᵛ −2.40 ᵛ

30.5

173.4 43.6 ᵛ

217.0 74.5 ᵛ −2.36 ᵛ

Index Right. A.

267.8 36.4 ᵛ

304.6

91.7 26.0 ᵛ

117.7 62.4 ᵛ −2.76 ᵛ

271.2 24.4 ᵛ −2.71 ᵛ

299.6

86.6 37.0 ᵛ

123.6 61.4 ᵛ −2.66 ᵛ

mean −2.56 ᵛ

8 14 5

8 20 5

34 10. ᵛ

+ 17 5. ᵛ

+5 −27. ᵛ

13 16 34. ᵛ

2442.5532 ᵛ Color 2 in Phot.

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1909phae.proj..596W

May 15, 1909.

μ Cephei.

0	50
12	15
11	25

+81.2

W. Alls. Rows Rec. Phot. T.

9.5 in cafe used

Index Left. B. I

76.9 ← Var. Hrs.

8 35 30

134.0 ν7.1 ν

250.0

321.6 71.6 ν / 12 A.7 ν −1.00 ν

65.9 76.9 ν −1.00 ν

8 37 30

142.8

259.7 ν1.6 ν

311.3 12 A.ν ν −1.01 ν

Index Right. A.

333.7

8 40 5

56.4 A2.7 ν

168.5

222.1 ν3.6 ν / 136.3 ν −0.Aν ν

347.0 ν6.6 ν −0.Aν ν

8 41 40

43.6

155.4 A0.ν ν / 137.0 −0.A3 ν

235.8

mean = 0.92 ν

154 ν ν ν

A 3A ν1. ν

+ν −2 ν

13 3A 1ν. ν

AννA. ν6A2 ν

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1909phae.proj..596W

May 15, 1909

Same Again. II

Index Right. A.

	331.2		
9 17 20	57.9	26.7	
	162.5		
	233.8	71.3 / 1 57 20.0	−0.42
	343.9	6 57.7	−0.36
9 19 0	49.4		
	145.0		
	243.0	98.0 / 163.5	−0.31

Index Left, B.

	241.2		
9 21 45	328.0	26.8	
	74.2		
	137.8	63.6 / 1 57 0.4	−0.57
	253.2	64.7	−0.50
	317.9		
	59.9		
	152.1	92.2 / 1 56.9	−0.44

Mean −0.43

9 23 35

21 40.

9 20 27.

+57 −27.

1 4 19 57 20.

2442.5972

1909phae.proj..596W

May 15, 1909.

Same Again III

Index Left B.

9 25 55	237.7		
	328.8	91.1	
	74.0		
	141.0	67.0	
		158.1	−0.42
9 27 35	249.2		
	319.5	70.3	−0.36
	62.9		
	157.4	94.5	
		165.2	−0.29

Index Right A.

9 29 50	145.4		
	245.0	99.6	
	342.8		
	49.8	67.0	
		166.6	−0.25
	157.0		
	233.8	76.8	−0.15
	325.0		
	65.4	100.4	
		177.2	−0.05

Mean −0.26

9 32 5

11 25.1

9 24 1.

+ −27.

14 24 24.

4422.6031

1909phae.proj..596M

May 15, 1909.

Same Again. IV

Index Right A.

	143.0		
9 34 20	244.9	101.9 ✓	
	340.5	70.6 ✓	
	51.1	172.5 ✓	−0.14 ✓
	153.9	101.1 ✓	−0.06 ✓
9 36 10	235.0		
	325.0		
	643	99.3 ✓	
		100.4 ✓	+0.01 ✓
		179.6 ✓	

Index Left. B.

	54.3		
9 39 25	155.8	101.5 ✓	
	246.6	72.6 ✓	
	322.2	177.1 ✓	−0.05 ✓
	67.6	75.4 ✓	−0.02 ✓
	143.4		
	233.8	90.1 ✓	
	331.9	173.9 ✓	−0.11 ✓
		Mean	−0.07 ✓

9	41	40
	151	3 ✓ ✓
9	37	54.✓ ✓
+✓		−27.
14	37	27. ✓

4462.6093 ✓

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1909phae.proj..596W

May 15, 1909

Same Aggn V

Index Left A.

56.3
160.4 104.1 ✓
246.4
321.5 75.1 ✓ / 179.2 ✓ −0.02 ✓

9 48 20

66.8
148.7 81.9 ✓ +0.02 ✓
234.8
336.0 101.2 ✓ / 123.1 ✓ +0.06 ✓
176.9 ✓

9 50 40

Index Right A.

319.0
68.9 109.9 ✓
152.0
239.2 87.2 ✓ / 197.1 ✓ +0.32 ✓
162.9 ✓

9 53 10

331.2
59.6 82.4 ✓ +0.34 ✓
139.9
250.0 110.1 ✓ / 194.5 ✓ +0.35 ✓
161.5 ✓

Mean +0.18 ✓

9 54 55

207 ✓.
9 ✓1 46. ✓
+5 −27. ✓
14 ✓1 19.
4462.6189 ✓

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1909phae.proj..596W

May 15, 1909

Same Again. E1

Index Right A.

323.5
69.6
1488
241.8 — 93.0 — 199.1 — 160.9 — +0.36

327.7
613
137.0
2513 — 114.3 — 207.9 — 162.1 — +0.53

Index Left B.

231.8
340.4
57.9
150.8 — 92.9 — 201.5 — 158.5 — +0.41

242.0
325.9
50.8
162.8 — 112.0 — 195.9 — 164.1 — +0.30

Mean +0.40

9 57 10

9 59 10

10 2 15

10 4 35

24[illegible] 10.

+0 1 2.

10 0 42.

+5 −27.

15 0 21.

A442.62V3

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1909phae.proj..596W

May 15, 1909.

Troubled throughout series by light cloud and haze. As clouds became thicker stars disappeared after series was ended so that sprocket etc. was not read but region thoroughly identified before beginning.

Double Star (New List) = Burnham's Cat 7449

15	5-2	- 19.6
14	27	
0	25	
11	35	

Abandoned.

W's watch used for times
Watch 27 secs fast.

L. P. P.

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1909phae.proj..596M

May 12. 1909. (Tuesday).

ν Herculis. (Region of).

17	12	+33.2
11	40	
−V	32	
6	24	
11	VV	
−V	17	
+6	43	

+33° 2891

Add 6 S. compared with New Provisional 6 S.
W. Obs. W Rec. Plot T

9.5 in caps used

For measts., see fol. pages.

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1909phae.proj..596W

May 18, 1909.

Index Above A.

249.6 ← Old b S Dec

318.5 69.9 ✓

79.7 49.1 ✓

128.8 118.0 ✓ −1.2K ✓

263.0 K6.0 ✓ −1.3K ✓

309.0

72.0 63.6 ✓

135 6 109.6 ✓ −1.43 ✓

Index Below B.

159.8 73.2 ✓

233.0

348.5 √1.0 ✓

39.5 124.2 ✓ −1.10 ✓

168.5 √3.1 ✓ −1.06 ✓

221.6

336.8 7√.2 ✓

52.0 124.3 −1.01 ✓

Mean −1.20 ✓

8 11 5

8 31 45

K2 √0. ✓

A 21 2√. ✓

+√ +1. ✓

13 21 26. ✓

A44√. √√6√+ ✓

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1909phas.proj..596W

May 18, 1909

Same Again II

Index Below B.

9 12 20

341.0
50.5 69.5 ✓
169.7
219.8 ∓0.1 ✓
119.6 ✓ −1.20

351.0
37 3 46.3 ✓ −1.20 ✓
161.1
234.0 72.9 ✓
119.2 ✓ −1.21 ✓

Index above A.

245.0
325.5 80.5 ✓
80.9
123.0 42.1 ✓
122.6 ✓ −1.14

Mean −1.17 ✓

9 22 20 assumed.
34 40. ✓
9 17 20. ✓
∓ +1. ✓
14 17 21. ✓

Stopped by clouds.

Observed (both groups) through clouds, and stopped by clouds in second group. Observations very difficult.

L. P. P.

W's watch used for times.
Watch I see. slow

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