KG
11365
579

1906phae.proj..580w

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1906phae.proj..58C

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1906phae.proj..580W

April 17, 1906 (Tuesday)

X Persei Phot. J K. Obs. Bowie Rec

3 45 +31.4
9 15
5 30

9".5 bap

Index Left

73.6 ← var. dis

7 45 48

112.5	38.9'	
258.6	29.8'	
288.4	68.7'	−2.55'

−2.54'

78.9		
107.5	28.6'	
253.5	40.5'	
294.0	69.1	−2.54'

Index Below

344.3

7 59 40

22.3	38.0'	
172.3	23.1'	
195.4	61.1'	−2.82'

Mean −2.68'

~~353.6~~

Stopped by clouds

Hour angle not read as images were lost in clouds

S.T. 10 35
H.A.
Dec. +31.0
P.A 240.0
Sprocket −5.5B
" −4.5B

P.A and sprocket not quite exact as images were lost in clouds before accurate settings ~~that~~ are however pretty nearly correct Dec. reading alright, region thoroughly identified

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1906phae.proj..580M

April 17, 1906

New Algol Var 29. 1906 (Ametr) Phot. I & Obs. Bowie Rec

4 8 +41.9
10 54
6 46

Index Above

137.9 ← Comp.
225.76.0 88.1
331.4 64.2
35.6 152.3

9 4 52

150.8
218.54 67.6
320.7 7.9
48.6

Index Below

44.0
142.0

~~Stopped~~ by clouds impossible to finish group. ~~Reject~~ above

R R Draconis Phot. I & Obs Bowie Rec.

18 40 +62.46
11 20
7 20
4 40

Measurements on fol. page

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1906phae.proj...586W

April 17, 1906.

Index Cor.

225.0 ← comp. Star dis

9 42 18

321.3	96.3'		B
52.7	80.8'		
133.5	177.1'	+0.05'	

233.0 +0.08'

312.0	79.0'	
46.3	95.0'	
141.3	174.0'	+0.11'

Index Cor B

137.1

229.0	91.9'		A.
324.5	76.6'		
41.1	168.5'	+0.22'	

146.4 +0.26'

9 52 2

219.2	72.8'	
317.0	91.8'	
48.8	164.6'	+0.29'

94 20

9 47 10

5 +46

14 47 56 S.T. 11h 58m Mean +0.17'

H.A. −6 40

7318.6166 Dec. +62.0

P.A. 275.0 by B

Sprocket −2.5 B

" −1.5 b

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1906phae.proj..580W

April 17, 1906.

Fourth Type Star -1° 2312 Phot. 3 Ht. Obs. Bowie Rec

9 32 −0.5
12 17
2 45

Index Lat

67.4 Comp Star dis.

10 36 58

~~120.0~~ 19.9	52.5'	B
253.4	40.3'	
293.7	92.8'	+1.84'

72.5		+1.80'
113.6	41.1'	
245.7	55.1'	
300.8	96.2'	+1.75'

Index R ~~+B~~

336.4		A
29.8	53.4'	
164.6	38.0'	
202.6	91.4'	+1.88'

343.5		+1.86'
22.1	38.6'	
156.0	54.2'	
210.02	92.8'	+1.84'

Means +1.83'

10 46 0
82 58'
10 41 29'
5 +46'
15 42 15'

7318.6543

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1906phad.proj...580W

April 17, 1906

S.J.	12h	50m
H.A.	+ 3	4
Dec.	−1.2	
P.A.	210.1 Sec. B	
Sprocket	−0.5 B	
"	+0.5 b	

H's watch used for times tonight
H watch 46 sec. slow

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1906phae.proj..580M

April 18, 1906 (Wednesday)

X Persei Phot. 3 H. Obs. Bowie Rec.

3 45 +31.4
9 20
5 35

9.5 Gap

Index Left

254.5 var. dir.

7 37 25

292.0 37.5' B
79.0 28.3'
107.3 65.8' −2.65'

259.9 −2.66'
287.8 27.9'
74.6 37.7'
112.3 65.6' −2.66'

Index Right

167.0 A
199.6 32.6'
351.5 23.0'
14.5 55.6' −3.03'

172.1 −2.98'
7 49 47 196.0 23.9'
346.4 34.1'
20.5 58.0' −2.94'

86 72'
7 43 36'
5 +45'
12 44 21

Mean −2.82'

7319.5309

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1906phaa.proj...500W

April 15, 1906

S.J. 10h 1m
H.A. +6 14
Dec. +31.0
P.A. 240.0 Vera
Sprocket −5.5 δ
" −4.5 b

New Algol Var 29.1906 Phot J.H. Obs Bowie Rec.

4	8	+41.9
10	8	
+6	0	

For measurements see fol. page

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1906phae.proj..58CM

April 18, 1906

Index Above

	320.2	Comp. Star dis	
8 15 8	47.3	87.1'	A
	147.2	68.8'	
	216.0	155.9'	+0.46'
	327.7		+0.44'
	36.1	68.4'	
	136.1	89.7'	
	225.8	158.1'	+0.42'

Index Below

	223.2		
	322.7	99.5'	B
	53.2	80.3'	
	133.5	179.8'	0.00
	235.4.3		+0.03'
8 28 36	311.9	77.6'	
43 44'	43.5	99.4'	
8 21 52'	142.9	177.0'	+0.06'
5 +45'			
13 22 37'	S.D. 10h	42	Mean +0.24'
	Mo. A. +6	28	
7319.5573	Dec. +42.1		
	P.A. 146.8 Ser. B		
	Sprocket -2.5 A		
	" -1.5 B		
	" -1.0 b		

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1906phad.proj...500W

April 18, 1906

R R Draconis Phot. J H. Obs. Bowie Res.

18	40	+62.6
11	10	
7	30	
4	30	

Index L & A

45.9	← comp. Star dis.	
138.6	92.7'	
234.0	76.4'	
310.4	169.1'	+0.20'
54.4		+0.14'
130.2	75.8'	
223.8	99.6'	
323.4	175.4'	+0.09'

Index R & D

317.5		
51.6	94.1'	
148.6	71.4'	
220.0	165.5'	+0.27'
326.0		+0.23'
41.X3	75.3'	
135.7	94.8'	
230.5	170.1'	+0.19'

Mean +0.18'

9 17 28

9 27 40

44 68'

9 22 34'

5 +45'

14 23 19

7319.5995

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1906phae.proj..580M

April 18, 1906.

S.T. 11h 38m
H.A. − 7 0
Dec. +62.0
P.A. 275.3 Ver. B
Sprockets − 2.5 B
" − 1.5 b

H's watch used for times tonight
Hatch 45 sec. slow

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1906phad.proj...580W

April 19 1906 (Thursday)

R R Draconis Phot.] Ir. Obs. Bowie Rec

18	40	+626
10	25	
8	15	
3	45	

~~Fourth~~ ~~Type~~ ~~Star~~ -1° 2312 Phot.] Ir. Obs Bowie Rec

9	32	-0,5
90	40	
1	8	

5 40 Clouds came suddenly and now overspread ~~the~~ sky

9 00 ~~Sky~~ still ~~thickly~~ cloudy with apparently not prospect of clearing. It also looks as though rain drops are coming, ~~Stars~~ are

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1906phae.proj..580M

April 19, 1906.

flashes of lightning at times, ~~these~~ flashes becoming more pronounced and more frequent at ~~the~~ present ~~time~~

9 15 blonde growing still thicker, no stars visible evidently no chance for anything further.

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1906phae.proj...580W

April 20, 1906. (Friday)

New Algol Star. 29. 1906 (Greb) Phot. 3 St. Ok. Louvie Rec

4	8	+41.9
9	18	
5	10	

Index Above

317.1 ← Comp. Star dis.

~~50 21~~

8 22 0

147.3 ~~48.0~~

217.1 ~~149.2~~

317.2 Clouds

49.0

19.8'	
91.8'	
161.6'	+0.35'

A

136.8 +0.32

228.0

326.4

40.5

91.2'	
74.1'	
165.3'	+0.28'

Index Below

55.3

129.3

222.4

321.6

74.0'	
99.2'	
173.2'	+0.13'

B

42.9 +0.10'

8 35 43

57 43

8 28 52

5 +44

13 29 36

141.7

231.5

308.5

98.8'	
77.0'	
175.8'	+0.08'

Mean +0.21'

7321.5622

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1906phae.proj..58CM

April 20, 1906

S.J. 10^h 56^m
R.A. +6 42
Dec. +42.1
P.A. 146.5 ter S
Sprocket −2.5 A
" −1.5 S
" −1.0 b

RR Draconis Phot. J H. Obs. Bowie Rec.

18	40	+62.6
11	5	
−7	35	
+4	25	

For measurements see fol. page

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1906phae.proj..580M

April 20, 1906.

Index L & A

	225.0 ←	comp. Star. dis.
9 6 13	321.8	96.8'
	54.9	75.5'
	130.4	172.3' +0.14'

B

	234.4	+0.08'
	315.7	81.3'
	43.7	97.0'
	140.7	178.3' +0.03'

Index R & B

	147.2	
	218.9	71.7'
	318.2	91.7'
	49.9	163.4' +0.32'

A

	137.0	+0.27'
9 17 50	229.5	92.5'
	325.0	76.0'
	41.0	168.5' +0.22'

Mean +0.18'

9 17 50
23 63'
9 11 62'
5 +44'
14 12 46' S.T. 11 33
H.A. −7 6
7321.5923 Dec. +62.0
P.A. 275.1 Der. B
Sprocket −2.5 B
" −1.5 b

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1906phae.proj..580M

April 20, 1906

~~Fourth~~ Type Star -1° 2312 Phot. 3 Ar. Obs. Bowie Res.

9	32	−0.5
11	42	
2	10	

Index R & B

337.2 ← comp. ~~Star~~ dis.

9 44 53

29.8	52.6′	(A)
163.8	38.2′	
202.0	90.8′	+1.89′

343.6		+1.84′
23.5	39.9′	
155.5	54.3′	
209.8	94.2′	1.80′

Index L & A

246.5		(B)
298.8	52.3′	
72.7	39.4′	
112.1	91.7′	+1.87′

252.2		+1.80′
292.1	39.9′	
64.2	57.7′	
121.9	97.6′	+1.72′

Mean +1.82′

9	54	10
	98	63′
9	49	32′
5		+44′
14	50	16′

7321.6183

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1906phae.proj...580M

April 20, 1906

S. T 12h 10m
R. A + 2 25
Dec - 1.2
P. A 30.0 Ser B
Sprocket - 0.5 B
" + 0.5 b

H's watch used for times tonight
Hatch 44 sec. slow.

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1906phae.proj..580W

April 21, 1906 (Saturday)

~~Fourth~~ Type Star +38°2389 Phot. I & Obs Bouvé Rec

12 49 +39.1

9 29

13 20

8 40

Full aperture

Index Above

7 35 blends 149.2 ← 4th type dis.

8 18 4 216.9 67.7'

336.9 51.3'

28.2 119.0' -1.21'

156.3 -1.18'

210.8 54.5'

329.1 67.0'

36.1 121.5' -1.16'

Index Below

53.0

133.8 80.8'

242.7 58.8'

301.5 139.6' -0.78'

9 13 35

8 30 9

17 31 39

8 45 50

5 +45

13 46 35 → blends

8 35

8 55 0 Still cloudy

~~63.0~~ 234.8 -0.82'

~~+236~~ 311.5 76.7'

~~231.5~~ 63.5 59.3'

122.8 136.0' -0.86'

Mean -1.00'

7322.5740 Altitude rather high

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1906phae.proj...580M

April 21, 1906.

S. T. 11h 38.m
Lo. A -1 15
Dec +37.4
P. A 204.0 Ver. 8
Sprocket -4.4 A
" -3.5 B
" -2.8 C

Ist observation on previous group, continually troubled by clouds, it took about an hour to take the group; observations made when possible & through clouds, settings made slowly and with as much care as possible, group 1/3 weight

Fourth Type Star +68°617 Phot. J H. Obs. Bowie Rec.

10	35	+68.2
11	53	
1	18	

For measurements see fol. page.

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1906phae.proj..580W

April 21, 1906

Index R & L

	164.0	4th type dis.	
9 49 50	198.4	34.4'	A
	350.3	29.1'	
	19.4	63.5'	-2.73'
	167.5		-2.72'
	195.9	28.4'	
	347.2	35.4'	
	22.6	63.8'	-2.72'

Index L & B

	69.9		
	113.7	43.8'	B
Clouds	258.0	30.9'	
	288.9	74.7'	-2.36'
	76.3		-2.32'
9 58 5	110.0	33.7'	
10 7 55	252.5	43.0'	
9 53 58	295.5	76.7'	-2.29'
5 +45			
14 54 43		Mean	-2.52'

7322.6213 Altitude rather high

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1906phae.proj..580M

April 21, 1906.

S.T. 12h 19m
H.A +1 39
Dec +68.5
P.A 240.0 der B
Sprocket −2.5 B
" −1.5 b

H's watch used for times tonight.
Watch 45 sec. slow.

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1906phae.proj..580N

April 25, 1906 (Wednesday)

New Algol Var 29. 1906 (Pueblo) Phot. J.H. Obs. Bowie Rec

4 8 +41.9
9 48
5 40

Index Above A

317.6	comp.	Star dis.
48.8	91.2'	
148.6	66.2'	
214.8	157.4'	+0.43'

7 44 14

329.3		+0.40'
37.2	67.9'	
137.0	91.9'	
228.9	159.8'	+0.38'

Index Below B

222.5		
321.4	98.9'	
55.0	76.6'	
131.6	175.5'	+0.08'

235.0		+0.08'
312.6	77.6'	
45.0	97.7'	
142.7	175.3'	+0.09'

Mean +0.24'

7 56 42
100 56'
7 50 28'
5 +53'
12 51 21'

7326.5357

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1906phae.proj...580

April 25, 1906.

S.J. 10^h 30^m
H.A +6 17
Dec. +42.1
P.A. 145.5 per ☉
Sprocket −2.5 A
" −1.5 ☉
" −1.0 b

H Geminorum		Phot. 3 H. Obs. Bowie Rec.
6	30	+16.5
10	38	
4	8	

9"5 bra. measd.

For measurements see fol. page.

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1906phae.proj..58CW

April 25 1906

Index Above

	257.0	Star. dia	
8 29 5	290.1	33.1'	A
	71.2	44.6'	
	115.8	77.7'	-2.26'
	249.8		-2.26'
	296.8	47.0'	
	77.8	31.1'	
	108.9	78.1'	-2.25'

Index Below

	169.3		
	197.2	27.9'	B
	342.1	41.1'	
	23.2	69.0'	-2.54'
	162.4		-2.54'
8 41 6	203.1	40.7'	
70 11	349.0	28.7'	
8 35 6	17.7 ~~8.0~~	69.4'	-2.53'
5 +53			
13 35 59			Mean -2.40'

S.T. 11h 22m
H.A. +4 53
Dec. +15.4
P.A. 159.5 Var. B
Sprocket -4.5 A
" -3.5 B
" -3.0 b

7326.5667

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1906phae.proj...580

April 25, 1906.

Q Shapley

1 79.1905 = 044880 Phot. 3 H. Obs. Bonn Rev

4 35 +81.0

12 00

7 25

Index Err B

252.5 ← bcomp. star dis

9 45 40 294.8 42.3'

67.4 54.8'

122.2 97.1' +1.73'

243.1 +1.66'

303.0 59.9'

71.8 42.9'

114.7 102.8' +1.59'

Index Err B

166.0

200.7 34.7' A

336.5 53.5'

30.0 88.2' +1.96'

155.0 +1.92

9 56 35 210.0 55.0'

101 75' 344.3 36.7'

9 50 68' 21.0 ~~20.9~~ 91.7' +1.87'

5 +53'

14 52 1'

Mean +1.79'

7326.6194

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1906phae.proj..58CM

April 25, 1906

Index R & B

II A

164.5

10 1 34

202.4 37.9'

335.1 55.9'

31.0 93.8' +1.81'

154.6 +1.84'

209.3 54.7'

344.0 37.0'

21.0 91.7' +1.87'

Index L & A

72.8

113.6 40.8'

241.6 59.3'

300.9 100.1' +1.65'

64.5 +1.70'

10 13 8 119.8 55.3'

14 42' 252.2 41.3'

10 7 21' 293.5 96.6' +1.74'

5 +53'

15 8 14'

Mean +1.77'

7326.6307

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1906phae.proj..580

April 25, 1906.

III

Index L & A

71.1
112.3
246.1
299.7

41.2'
53.6'
94.8' +1.79'

63.7 +1.74'
121.0
253.1
294.0

57.3'
40.9'
98.2' +1.70'

Index R & B

343.3
20.8
156.0
209.3

37.5'
53.3'
90.8' +1.89'

335.2 +1.86'
30.6
164.0
201.6

55.4'
37.6'
93.0' +1.83'
Mean +1.80'

10 39 57

10 53 18

92 75'
10 46 38
5 +53'
15 47 31

S.T. 13h 44m
R.A. +8 54
Dec. +80.6
P.A. 188.2 Vm B
Sprocket −1.5 A
" −0.5 B
" 0.0 b

7326.6580

Use watch used for times
Watch 53 sec. slow

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1906phae.proj..580M

April 26, 1906 (Thursday)

ν Geminorum Phot. J. K. Obs. Bowie Sec.

6 30 +16.5

9 50

3 20

9.5 bap

7 25 blonds

7 35 more cloudy still.

Index Above

256.4 ← var. dis

8 22 20

290.5	34.1'		A
67.8	50.6'		
118.4	84.7'	-2.06'	

~~245.6~~ 75.2 -2.04'

blonds ~~299.4~~ 111.3 36.1'

~~76.0~~ 249.0 49.6'

85.7' -2.03'

blonds 298.6

Index Below

342.0			
23.7	41.7'		
168.2	29.5'		B
197.7	71.2'	-2.47'	

347.6 -2.42'

18.2	30.6'	
161.0	43.6'	
204.86	74.2'	-2.37'

Mean -2.23'

8 57 0

79 20'

8 39 40'

5 +57'

13 40 37

7327.5698

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1906phae.proj...580w

April 26, 1906.

S. J. 11h 41m
Hb. A. + 5 10
Dec. +15.5
P. A. 160.0 Ser. B
Sprocket – 4.5 A
" – 3.5 B
" – 3.0 b

~~Fourth~~ Type Star +36° 3243 Phot. J H. Obs Lowell Rec

18	40	+37.4
12	00	
6	40	
5	20	

9 30 Clouds

Abandoned for present

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1906phae.proj..580M

April 26, 1906

R S Cephei 79.1905 Phot. J. H. Obs. Bowie Rec.

4 35 +86.0
12 25
7 50 Index L & A

51.2 ← comp. Star dis.

10 0 42	131.6	80.4'
	222.7	98.4'
	321.1	178.8' +0.02'

43.6 +0.08'

	139.9	96.3'
	234.0	76.9'
	310.9	173.2' +0.13'

Index R & B

	324.0	
	38.7	74.7'
	137.9	90.4'
	228.3	165.1' +0.28'

315.9 +0.25'

10 11 46	47.74	91.5'
11 88'	144.0	76.6'
10 5 74'	220.6	168.1' +0.22'
5 +57'		
15 7 11'		Mean +0.16'

7327.6300

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1906phae.proj...580

April 26, 1906.

S. J. 12h 59m
H. A. +8 6
Dec. +80.5
P. A. 188.0 Ser B
Sprocket −1.5 A
" −0.5 B
" 0.0 b

W's watch used for times tonight.
Watch 57 sec. slow

Fourth Type Star +36°32'43 Phot. J H. Obs Bowie Rec.

18	40	+37.4
13	5	
5	35	
6	25	

10 33 Clouds again
Sky thickly cloudy, no chance for anything further

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1906phae.proj..580M

April 27, 1906 (Friday)

H Geminorum Phot. 5 H. Obs. Bowie Rec.

6 30 +16.5
9 50
3 20

9.5 bar

Index Lx A

255.6 ← var. dis.
291.4 35.8'
69.5 46.9'
116.4 82.7' -2.12'

7 49 48

247.5 -2.09'
297.7 50.2'
75.4 34.6'
110.0 84.8' -2.06'

Index Rx B

168.5
198.0 29.5'
339.8 44.2'
24.0 73.7' -2.39'

162.0 -2.36'
206.3 44.3'
347.5 30.8'
18.3 75.1' -2.34'

Mean -2.22'

8 2 32

15 51 80'
7 55 70'
5 +55'
12 57 5'

73 28.5397

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1906phae.proj...580W

April 27, 1906.

S. J. 10 55
H. A. +4 25
Dec. +15.3
P. A. 160.0 Ver B
Sprocket -4.5 A
" -3.5 B
" -3.0 b

ψ Geminorum Phot J W. Obs Bowie Rec

b	30	+16.5	Same Again
11	20		
4	50		9".5 b api used

Measurements on fol. page

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1906phae.proj..580M

April 27, 1906.

Index Above (Left of a)

74.2 ← var. dis.		B
111.8	37.6'	
247.5	51.9'	
299.4	89.5'	−1.93'
68.0		−2.02'
116.3	48.3'	
256.0	34.6'	
290.6	82.9'	−2.11'

Index Below (Right of a)

347.8		
18.6	30.8'	A
162.0	42.5'	
204.5	73.3'	−2.40'
341.1		−2.39'
23.4	42.3'	
167.5	31.7'	
199.82	74.0'	−2.38'
	Mean	−2.20'

8 52 34

9 6 10

17 58 44 :
8 59 22 :
5 +55 :
14 0 17

S. T. 11h 54m
H. A +5 24
Dec +15.5
P. A 160.6
Sprocket −4.5 A
−3.5 B
−3.0 b

7328.5835

Obs. on last group of ♊ Geminorum a little more dif. than on first group. First group easily taken sky clear and air steady altitude fairly high. In second group air a little ~~more~~

9 9/5 14 7

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1906phae.proj..580W

April 27, 1906.

unsteady, sky clear but altitudes somewhat lower settings made very slowly and with great care and group considered first class.

R R Draconis Phot. I H. Obs. Bowie Rec.

18 40 +62.6
12 5
6 35
5 25

Index Corr B

224.4 ← Comp. Star dis.
319.5 95.1'
54.3 77.3'
131.6 172.4' +0.14'

231.6 +0.10'
313.3 81.7'
45.3 95.3'
140.6 177.0' +0.06'

Index R & D

136.8
230.8 94.0'
326.9 72.5'
39.4 166.5 +0.25' A

144.5 +0.25'
220.5 76.0'
317.1 90.8'
47.9 166.8 +0.25'

Mean +0.18'

9 37 40

9 49 35
86 75'
9 43 38'
5 +55'
14 44 33

7328.6143

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1906phae.proj..580M

April 27, 1906.

S. T. 12h 35m
H. A. −6 5
Dec. +62.0
P. A. 275.1 Ker. B
Sprocket −2.5 B
" −1.5 b

Fourth Type Star +36°3243 Phot J H. Oke Bowie Res.

18	40	+37.4
12	40	
6	00	
6	00	

For measurements see fol. page

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1906phas.proj...580W

April 27, 1906

Index L & A

	332.0 ← 4th type star		
10 18 45	38.5	66.5'	B
	152.0	58.5'	
	210.5	125.0'	-1.08'
	335.4		-1.00'
	33.4	58.0'	
	145.2	74.6'	
	219.8	132.6	-0.92'

Index R & B

	234.3		
	313.1	78.8'	
	62.2	61.0'	A
	123.2	139.8'	-0.78'
	243.1		-0.77'
	304.0	60.9'	
	53.4	79.6'	
	133.0	140.5'	-0.76'

10 27 22	
45 67'	
10 22 64'	
5 +55'	
15 23 59'	

S.T. 13^{h} 14^{m}
L.A. -5 26
7328.6417 Dec. +36.1
P.A 236.0 Ver B
Sprocket +0.5 B
" +1.5 b

Mean -0.88'

It's ~~watch~~ used for times
Watch 55 sec. slow

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1906phae.proj..580M

April 28, 1906 (Saturday)

H Geminarum · Phot. J H. Obs. Boone Rec

6 30 +16.5
9 50
3 20

9.5 bar missed.

Index L & A

	73.4 ← var. dis		
7 42 58	113.1	39.7'	B
	246.1	54.0'	
	300.1	93.7'	-1.82'
	66.6		-1.85'
	120.5	53.9'	
	254.7	37.3'	
	292.0	91.2'	-1.88'

Index Q & B

	167.1		
	200.2	33.1'	A
	338.9	47.1'	
	26.0	80.2'	-2.19'
	159.1		-2.16'
7 57 30	208.1	49.0'	
99 88'	347.0	33.2'	
7 49 74'	20.2 ~~19.6~~	82.2'	-2.13'
5 +62'			
12 51 16'		Mean	-2.00'

7329.5356

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1906phae.proj...560W

April 28, 1906

S.J.	10	50
Hb. A.	+ 4	20
Dec.	+15.4	
P.A.	159.5	Ser. S
Sprocket	- 4.5	A
"	-3.5	B
"	-3.0	b

RR Draconis Phot. J H. Obs Bowie Rec

18	40	+62.6
10	55	
7	45	
4	15	

For measurements see fol. page

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1906phae.proj..580M

April 28, 1906

Index L & A

I

72.0 ← bomp. star dis

8 24 56

114.5	42.5'	B
257.0	30.8'	
287.8	73.3'	+2.40'

79.0 +2.42'

8 29 42

107.9	28.9'	
249.9	43.5'	
293.4	72.4'	+2.43'

Index R & B

345.0

8 34 42

23.2	38.2'	A
169.6	25.5'	
195.1	63.7'	+2.73'

351.5 +2.87'

8 39 8

15.0	23.5'	
165.8	32.7'	
198.5	56.2'	+3.01'

	126	145'
8	31	67'
5		+62'
13	33	9'

Mean +2.64'

7329.5647

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1906phae.proj..580

April 28, 1906.

Index R & B

II

			347.4		
8	48	10	17.9	30.5'	R
			170.8	20.3'	
			191.1	50.8'	+3.24'
			353.9		+3.30'
8	53	42	11.6	17.7'	
			167.4	30.6'	
			198.0	48.3'	+3.35'

Index L & A

			260.2		
9	1	35	287.5	27.3'	
			82.9	19.8'	B
			102.7	47.1'	+3.40'
			261.1		+3.40'
9	6	26	283.0	21.9'	
			80.8	25.0'	
			105.8	46.9'	+3.41'

34	108	113'
8	57	28'
5		+62'
13	58	30'

Mean +3.35'

9 11 Low auroral arch in north with one quite pronounced streamer, this streamer having a somewhat rose tint and extending half way up to Pole Star

7329.5822

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1906phae.proj..580M

April 28, 1906.

Index L & A

257.9

9 17 42 — 289.2 — 31.3' — III

83.4 — 19.8'

103.2 — 51.1' — +3.23'

262.6 — +3.24'

9 25 16 — 283.9 — 21.3'

78.0 — 29.0'

107.0 — 50.3' — +3.26'

Index R & B

168.8

9 32 57 — 195.8 — 27.0' — A

354.2 — 20.4'

14.6 — 47.4' — +3.39'

173.0 — +3.42'

9 39 48 — 190.9 — 17.9'

348.5 — 28.3'

16.8 — 46.2' — +3.45'

+3.33'

	113	163
9	28	56
5		+62
14	29	58

7329.6042

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1906phae.proj..580

April 25, 1906.

		Index R & B
		350.4
9	52.2	17.0
		173.0
		192.0
		355.0
9	59 39	12.8
		171.0
		195.1

Reject above partial group, ~~the~~ var. is now so faint ~~that~~ ~~together~~ with ~~the~~ moonlight it is impossible ~~to~~ finish group, will wait a little as var. is at about ~~theoretical~~ min.

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1906phae.proj..580N

April 28, 1906

Index R vB

	167.1			
10 35 30	198.7	31.6'	IV	
	349.8	25.8'		A
	15.6	57.4'	+2.96'	
	167.1		+2.75'	
10 37 53	195.9	28.8'		
	345.0	38.1'		
	23.1	66.9'	+2.61'	

Index Lach

	70.0			
10 41 28	112.9	42.9'		B
	257.5	31.8'		
	289.3	74.7'	+2.36'	
	77.4		+2.34'	
10 43 52	108.0	30.6'		
	248.0	45.7'		
	293.7	76.3'	+2.31'	
156 163'				
10 39 41				
5 +62				
15 40 43'			Mean +2.56'	

7329.6532

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1906phae.proj..580N

April 28, 1906

Index Loc A

69.2

10	49	54	115.9	46.7'	V
			253.4	35.4'	
			288.8	82.1' +2.13'	B
			75.3	+2.05'	
10	53	17	111.0	35.7'	
			246.1	52.1'	
			298.2	87.8' +1.97'	

Index Loc B

340.0

10	56	16	26.5	46.5'	
			165.4	34.2'	A
			199.6	80.7' +2.17'	
			345.7	+2.10'	
11	0	17	23.1	37.4'	
			158.2	48.5'	
			206.7	85.9' +2.03'	

41	158	104'		
10	54	56'		
5		+62'		
15	55	58'	S.T. 13 45	Mean +2.08
			H.A -4 55	
7329.6639			Dec +62.0	It's ~~watch~~ used for times
			P.A 275.0 Vir B	Watch 62 slow
			Sprocket -2.5 B	
			" -1.5 b	

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1906phae.proj..580M

April 30, 1906 (Monday)

Fourth Type Star +38°1539 Phot ⊙ H. Obs Bonn Rev

6 27 +38.6

10 14

3 47 Index L & A

9".5 bap

	167.2	4th type star	
7 46 42	199.0	31.8'	B
	351.0	22.4'	
	13.54	54.2'	−3.09'
	172.4		−3.10'
	195.0	22.6'	
	348.3	31.1'	
	19.4	53.7'	−3.11'

Index R & S

	73.6		
	110.7	37.1'	A
	260.9	25.6'	
	286.5	62.7'	−2.76'
	80.4		−2.78'
	105.0	24.6'	
7 56 28	254.7	36.9'	
102 70'	291.6	61.5'	−2.80'
7 51 35'			
5 +63'			
12 52 38			Mean −2.94'

Although P.A. reads a little dif. from that on card, this is prob. due to some slight strain in the ~~track~~, region was thoroughly identified before beginning

7331.5365

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1906phae.proj..580

April 30, 1906

S.T. 10h 57m
H.A. + 4 26
Dec. +39.0
P.A. 190.5 Var B
Sprocket -3.5 B
" -2.5 b

Fourth Type Star +70° 644 Phot J H. Obs. Bowie Rec
11 23 70.1
11 23
0 0 0

Full aperture

For measurements see fol. page.

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1906phae.proj..580N

April 30, 1906

Index L & A

322.0	← bump Star dis	
45.1	83.1'	
150.4	64.3'	B
214.7	147.4'	+0.63'
331.2		+0.62'
35.4	64.2'	
140.8	84.2'	
225.0	148.4'	+0.61'

Index R & B

228.8		
315.8	87.0'	
60.5	67.1'	A
127.6	154.1'	+0.50'
239.7		+0.50'
305.25	65.8'	
48.9	88.1'	
137.0	153.9'	+0.50'

Mean +0.56'

9 1 10

9 14 54
15 64'
9 7 62'
5 +63'
14 9 5

S.T. 12h 16m
H.A. +1 19 Eyes normal
Dec. +70.0
P.A. 336.7 Ser B
Sprocket -4.5 B
" -3.5 b

7331.5897

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1906phae.proj...580W

April 30, 1906.

Fourth Type Start +36°3243 Phot. J H. Obs. Bowie Rec..

15	40	+37.4
12	35	
6	5	
5	55	

Index L & A

	329.0 ←	4th type dis
9 58 30	37.2	68.2'
	153.7	57.0'
	210.7	125.2' −1.08'

	334.8	−1.02'
	30.7	55.9'
	145.2	75.4'
	220.6	131.3' −0.95'

Index A & B

	234.0	
	314.5	80.5'
	62.5	60.0'
	122.5	140.5' −0.76'

	243.0	−0.78'
10 8 2	302.0	59.0'
19 66 32'	53.0	79.0'
9 63 16'	132.0	138.0' −0.81'
5 +63'		
15 4 19'		Mean −0.90'

Eyes pretty near normal

7331.6250

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1906phae.proj..580M

April 30, 1906.

S.J. 13 8
R.A -5 30
Dec +86.3
P. A 235.5 ber B
Sprocket +0.5 B
" +1.5 b

Fourth Type Star +68° 617 Phot. J. K. Obs. Bowie Rec

10	35	+68.2
13	18	
2	43	

Full aperture

Measurements on fol. page.

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1906phae.proj..580

April 30, 1906

Index Left

	164.5 ← 4th type dis	
10 39 38	198.8	34.3'
	349.6	27.4' B
	17.0	61.7' -2.80'
	168.9	-2.83'
	195.0	26.1'
	347.5	33.8'
	21.3	59.9' -2.86'

Index R & B

	71.5	
	114.1	42.6' A
	257.4	29.9'
	287.3	72.5' -2.43'
	79.0	-2.42'
10 51 24	108.6	29.6'
90 62	251.2	43.0'
10 45 31	294.2	72.6' -2.42'
5 +63		
15 46 34	S.T. 13h 49m	Mean -2.62'
	R.A. +3 8	
7331.6573	Dec. +68.1	It's watch used for a times
	P.A. 239.5 Var. B	Watch 63 sec. slow
	Sprocket -2.5 B	
	" -1.5 b	

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1906phae.proj..580W

May 1, 1906 (Tuesday)

Fourth Type Star 38°2389 Phot. 3 * Obs. Bowie Rec

12 49 +39.1
10 5
2 44
9 16

Full aperture used

Index Above

327.8 ←	4th type dis.	A
38.8	71.0'	
156.0	53.9'	
209.9	124.9'	-1.09'
337.3		-1.08'
27.7	50.4'	
145.0	75.0'	
220.0	125.4'	-1.08'

Index Below

231.5		B
315.2	83.7'	
61.0	61.3'	
122.3	145.0'	-0.67'
242.0		-0.70'
301.6	59.6'	
51.9	82.3'	
134.2	141.9'	-0.74'

Mean -0.89'

7 44 7

7 55 18
99 25'
7 49 42'
5 +65'
12 50 47'

Altitude pretty high and eye not quite normal.

7332.5353

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1906phae.proj..580W

May 1, 1906.

S.J. 11^h 00^m
H.A. −1 55
Dec. +37.5
P.A. 203.0 Ver. B
Sprocket −4.5 A
" −3.5 B
" −2.8 b

Fourth Type Star +24° 1656 Phot. 3 H. Obs. Bowie Rec.

7	36	+24.5
11	18	
3	42	

Full aperture used

Measurements on fol. page

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1906phae.proj..580N

May 1, 1906.

Index L & A

246.2 ←	4th type dis	B
301.4	55.2'	
55.2	75.4'	
130.6	130.6'	−0.97'
237.0		−1.02'
310.7	73.7'	
66.5	52.5'	
119.0	126.2'	−1.06'

Index R & B

160.3		
204.9	44.6'	A
330.0	64.3'	
34.3	108.9'	−1.44'
150.5		−1.44'
215.2	64.7'	
341.4	44.7'	
26.1	109.4'	−1.43'

Mean −1.23'

8 42 30

8 52 7

94 37

8 47 18

5 +65

13 48 23

7332.5753

L. T. 11h 55m

R. A. + 4 30

Dec. + 24.8

R. A. 165.0 for B

Sprocket − 5.5 B

" − 4.5 b

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1906phas.proj..580N

May 1, 1906.

Fourth Typ. Star +31° 1388 Phot. J. H. Obs. Bowie Jr.

6 43 +34.1

12 8

5 25

Full aperture

Index R & A

	137.5	comp. ~~Star~~ dia
9. 40 44	227.7	90.2'
	333.1	59.8'
	32.9	150.0' +0.58' A
	150.3	+0.56'
	216.0	65.7'
	319.5	86.7'
	46.2	152.4' +0.53'

Index 2 & 8

	42.3	
	141.9	99.6'
	234.7	76.3'
	311.0	175.9' +0.08' B
	56.8	+0.12'
	131.4	74.6'
	222.6	97.4'
	320.0	172.0' +0.15'

Mean +0.34'

9	49	42
	89	86'
9	44	73'
5		+65'
14	46	18'

Eyes fairly normal

7332.6155

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1906phae.proj..580N

May 1, 1906.

S.T. 12h 53m
H.A. +6 15
Dec. +31.9
P.A. 109.2 Ser. 8
Sprocket -2.5 B
" -1.5 b

Fourth Type Star +40°4210 Phot. J W. Obs. Bowie Rec

20	17	+39.8
13	7	
7	10	
4	50	

9."5 b ap

For measurements see fol. page

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1906phas..proj..580W

May 1, 1906

Index Above

222.0	Comp. star dec.	
324.9 ←	102.9'	
52.8	75.2'	
128.0	178.1'	+0.03'

11 4 0

228.6		+0.04
310.3	81.7'	
46.7	95.2'	
141.9	176.9'	+0.06'

Index Below

134.2		
228.0	93.8'	
321.7	79.3'	
41.0	173.1'	+0.13'

149.1		+0.14'
222.3	73.2'	
313.9	99.3'	
53.2	172.5'	+0.14'

11	14	0
	18	0
11	9	0
5		+65
16	10	5

S.T. 14^h 13^m Mean +0.09'

H.A. −6 15

7332.6737 Dec. +39.7

P.A. 221.5

Sprocket − 0.5

" + 0.5

H's watch used for times
Watch 65 sec. slow

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1906phae.proj..580N

May 3, 1906 (Thursday)

H Geminorum Phot. J H. Obs. Bowie Rec

6 30 +16.5
10 20
3 50

9".5 b rap used

Index Above

257.5 vars. dis.

7 57 38

257.5	30.0'	A
68.2	50.6'	
118.8	80.6'	-2.18'

248.6 -2.17'

297.7	49.1'	
77.1	32.1'	
109.2	81.2	-2.16'

Index Below

169.9		
196.0	26.1'	B
342.9	39.4'	
22.3	65.5	-2.66'

161.9 -2.59'

8 10 50

15	67	88	
7	63	74	
5		+67	
13	5	21	

204.0 3.6 41.7'
348.6 28.0
16.6 ~~+7.81~~ 69.7' -2.52'

-2.38'

Troubled a little by haze and light clouds during observations in preceding group.

7334.5454

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1906phas.proj..580N

May 3, 1906

S.J. 11h 33m
R.A. + 5 3
Dec. +15.5
P.A. 160.5 Ver B
Sprocket -4.5 A
" -3.5 B
" -3.0 b

Prisms have not been cleaned for some time and upon examination after previous group, it was found that they were pretty dirty and dusty. W. then cleaned the outer surfaces of both prisms. Prisms however were not taken apart and inner surfaces consequently were not cleaned.

Fourth Type Star +14° 1283 Phot J W. Obs Bowie Rec

6 17 +14.8
12 5
5 48

Full aperture used

For measurements see fol. page

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1906phae.proj..580W

May 3, 1906

Index L & A

	145.0 ← 4th type dia		
9 20 8	219.8	74.8'	B
	333.3	59.1'	
	32.4	133.9'	-0.90'
	153.6		-0.92'
	211.3	57.7'	
	325.4	74.1'	
	39.5	131.8'	-0.94'

Index R & B

	52.4		
	133.2	80.8'	A
	240.1	66.5'	
	306.6	147.3'	-0.63'
	64.5		-0.64'
	124.9	60.4'	
	230.9	85.6'	
	315.96.5	146.0'	-0.65'

Mean -0.78'

9	29	55
	49	63
9	24	62
5		+67
14	26	9

S.T. 12h 39m
Lat. +6 18
Dec. +15.4
P. A. 202.5 for B
Sprocket - 5.5 B
" -4.5 b

7334.6015

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1906phac.proj..580N

May 3, 1906

Fourth Type Star +70° 644 Phot. 3 ft. Obs. Bowie Rec

11 23 +70.1
12 56
1 33

Full aperture used

Index L & B

152.3 ← comp. Star dis.

10 13 13	214.6	62.3'	B
	323.0	82.2'	
	45.2	144.5'	+0.68'
	140.5		+0.64'
	226.0	85.5'	
	331.5	62.8'	
	34.23	148.3'	+0.61'

Index R & A

	61.2		A
	126.7	65.5'	
	225.5	93.9'	
	319.4	159.4'	+0.39'
	46.2		+0.38'
10 22 57	137.8	91.6'	
35 70'	239.3	69.2	
10 17 65'	30 ~~5.58~~.5	160.8'	+0.37'
5 +67'			
15 19 12'			Mean +0.51'

Somewhat troubled by light clouds in above group but obs. considered good

7334.6383

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1906phae.proj..580M

May 3, 1906.

S. T. 13h 37m
H. A +2 42
Dec +70.0
P. A 335.5 Var B
Sprocket -4.5 B
" -3.5 b

H's watch used for times
Hatch 67 sec. slow

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1906phea.proj...500N

May 4, 1906 (Friday)

ζ Geminarum Phot ⊼ ζ. Obs Bowie Rec

6	30	+16.5
10	20	
3	50	

7 33 Var. not yet visible on finder interval rate stars not visible twilight strong and some haze. As point on curve is not very much needed tonight and twilight is still strong (moon also two days past quarter) var. abandoned for eclipse of Jupe Sat which is coming shortly

Rads. Jup - I.

B α b 1182

7	51	38.5
7	52	38.5

W. obs. Bowie rec.

B 394

7	52	0.0
7	53	0.0

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1906phae.proj..580N

May 4, 1906

8	18	21	8	17	58	~~seen~~ ~~susp~~
	18	31		18	6	seen
	18	45		"	22	better seen
	18	59		"	36	more plainly seen
	19	18		"	55	still " " "
	19	33		19	10	very " "

B. & b. 1182			B 394		
8	26	37.0	8	27	0.0
8	27	37.0	8	28	0.0

Region low, seeing somewhat blurry, limb of Jup. blurry. Sats. somewhat blurry and sharp focus on same could not be obtained. focus just fairly good. Phot. R. was put on a little time before eclipse but on experimenting with the images, it was found that eclipse could not be taken photometrically all that could be done phot would have been to take an occasional setting at full brightness, Phot. was accordingly taken off and 1" eye piece (power 270) put on. This made things much better although seeing was still poor and region low Sat. was really susp. some five seconds before the first "seen" above mentioned, although it rather

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1906phae.proj...580N

May 4, 1906

did not happen to be recorded. The region was so low and the seeing so intermittent in its character that Sat. I would at times dis. from view even at full brightness

∴ Less previous eclipse.

From. $7^h\ 52^m\ 30^s$ to $8^h\ 12^m\ 10^s$ add 22. secs.
After that, add 23. secs.

Fourth ~~Jupiter Star~~ +61°667 Phot. J H. Obs. Bowie Rec

3	33	+62.9
12	00	
8	27	

9 0 - Clouds now everywhere southern sand came suddenly and quite abundantly

Measurements on fol. page

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1906phae.proj..580N

May 4, 1906

Index L & A

330.9 ← var. dia		
35.7	64.8'	(B)
155.3	51.7'	
207.0	116.5'	-1.27'
336.9		-1.22'
30.2	53.3'	
149.0	67.1'	
216.1	120.4'	-1.18'

Index R & (B)

233.7		
309.6	75.9'	(A)
64.8	56.0'	
120.8	131.9'	-0.94'
243.1		-0.96'
300.7	57.6'	
56.4	72.6'	
129.0	130.2'	-0.97'

Mean -1.09'

9 40 21

9 50 21
-90 42
9 45 21
5 +68'
14 46 29

S. T. 13h 6m
R.A. +9 5
Dec. +62.0
P.A. 185.0 Ver (B)
Sprocket -4.5 (A)
" -3.5 (B)
" -3.0 (C)

7335.6156

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1906phae.proj...580W

May 4, 1906

Fourth Type Star +14° 2048 Phot. 3 Hr. Obs. Bowie Rec

9	7	+15.6
13	15	
4	8	

Index R & A

236.6 ← 4th type dia.

10 29 55

314.3	77.7	
64.5	50.6	A
115.1	128.3	-1.01

244.1

300.7	56.6	-0.96
53.5	76.1	
129.86	132.7	-0.92

Index L & B

159.0

206.0	47.0	B
328.8	70.2	
39.0	117.2	-1.25

149.0 -1.30

10 43 2

	72 57	
10	36 28	
5	+68	
15	37 36	

213.57	64.7	
339.0	48.5	
27.5	113.2	-1.34

Mean -1.13

7335.6511

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1906phae.proj..580M

May 4, 1906

S. T. 13h 54m
H. A. 4 43
Dec. 15.0
P. A. 102.0 Ser. B
Sprocket -3.5 A
" -2.5 B
" -2.0 b

If a watch used for times
Watch 60 sec. slow

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1906phao.proj...580W

May 8, 1906 (Tuesday)

~~Fourth Type Star~~ +38 23

12	49	+39.1
10	49	
2	00	
10	00	

Abandoned

Fourth Type Star +2° 1715 Phot. 3 Yr. Obs. Bowie Rec

7	25	+2.2
11	30	
4	5	

Measurements on fol. page

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1906phae.proj..580M

May 8, 1906

Index Left

51.5 ← Comp. Star dis

8 26 17

133.2	81.7'	C
243.7	63.1'	
306.8	144.8'	+0.68'

61.6		+0.66'
125.1	63.5'	
232.1	83.5'	
315.6	147.0'	+0.63'

Index R+B

323.3		
42.3	79.0'	A
154.9	56.2'	
211.1	135.2'	+0.87'

334.7		+0.85'
32.0	57.3'	
142.4	79.8'	
222.2	137.1'	+0.83'

8 37 25

63 42'

8 31 51

5 +1 +21

13 33 12

S.T. 12h 10m

R.A. +4 37

7339.5647 Dec. +2.9

P.A. 205.5 for B

Sprocket −1.5 B

" −0.5 b

Mean +0.76'

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1906phao.proj...580W

May 8, 1906

Fourth Type Star -1° 2312 Phot. J. H. Obs. Bowie Rec.

9 32 -0.5

12 17

2 45

Index L & A

	244.2	Comp.	Star dis.
9 11 28	303.7	59.5'	
	71.3	41.2'	
	112.5	100.7	+1.64'
	250.5		+1.59'
	296.4	45.9'	
	62.5	59.1	
	121.6	105.0'	+1.54'

Index R & B

	155.6		
	211.0	55.4'	
	342.5	39.3'	
	21.8	94.7'	+1.79'
	163.7		+1.77'
9 18 24	202.9	39.2'	
	334.9	57.2'	
	32.1	96.4'	+1.75'
29 52		Mean	+1.65'
9 14 56			
5 +1 +21			
14 16 17			

7339.5946

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1906phae.proj..580M

May 8, 1906.

S.J.	12	46
H.A.	+3	0
Dec.	−1.3	
P.A	210.0 Ver. S	
Sprocket	−0.5 S	
"	+0.5 L	

Fourth Type Star +14° 2048 Phot. 3 W. Obs. Bowie Res.

9	7	+15.5
12	55	
3	48	

Full aperture used

Measurements on fol. page

9
5
14

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1906phag.proj...580

May 8, 1906

Not ledgered

Index 2 & 2

	234.7	4th ~~type~~ dis.	
9 49 6	313.5	78.8'	
	64.3	55.1'	
	119.4	133.9'	-0.90'
	241.9		-0.84'
	301.0	59.1'	
	53.5	80.5'	
	134.0	139.6'	-0.78'

Index 2 & 3

	326.7		
9 55 20	37.0	70.3'	
9 104 26'	159.0	48.5'	
9 52 13'	207.5	118.8'	-1.22'
5 +1 +21			
14 53 34	338.5		
	25.8	47.3	
		mean	-1.03'

In prec. group, considerably ~~troubled~~ by clouds and poor atmospheric conditions, clouds became much more troublesome after reversal of phot. so that fourth sitt could not be taken this group 1/2 weight. Sky becoming thickly cloudy everywhere Region thoroughly identified but as clouds now cover

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1906phae.proj..580M

May 5, 1906

this region naval P.A and Sprockets
readings could not be made

Ha watch used for times
Watch 1 m. 21 sec - slow

9

9

9 5
14

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1906phae.proj..586w

May 10, 1906 (Thursday)

R R Draconis Phot. 3 H. Obs. Bowie Rec
18 40 +62.6 Full aperture
11 20
7 20
4 40

8 0 0 Clouds.
8 15 0 " stars gone
8 42 0 Still cloudy in this region but ~~tendency~~ to clearing

Index L & A

222.9 ← Compr. Star dis.

9 10 50
320.4 97.5'
53.3 79.6'
132.9 177.1' +0.05' B

233.0 +0.04'
312.5 79.5'
42.2 99.0'
141.2 178.5' +0.03'

Index R & B

139.6 87.4' ~~136.5~~
227.0 77.3' ~~231.7~~ ~~95.2~~
324.5 164.7' ~~326.7~~ ~~73.3~~ A
41.8 ~~40.0~~ ~~168.5~~ +0.29'

+0.24'

9 37 10 147.0 ~~147.0~~
~~18 50~~ 220.9 73.9' ~~221.0~~ ~~74.0~~
47 60 316.0 95.5' ~~345.6~~ ~~64.7~~
9 23 60 169.4' ~~50.3~~ 138.7 +0.20'
5 +1 +27 51.5
14 25 27' Mean +0.14'

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1906phae.proj..580N

May 10, 1906

S.J.	13	18
H.A	-5	23
Dec	+62.0	
P.A.	275.2 Ver B	
Sprocket	-2.5 B	
"	-1.5 b	

In one of the readings in last two setts on previous page there was apparently an error of about 30° in reading the circle, it seems to have been the third reading of the last setts these two setts were consequently retaken

79.1905 = R Sbephei = 044880 Phot 3 H. Obs Bowie. Rec

4	33	+81.0
13	3.3	
9	0	

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1906phae.proj..58GW

May 10, 1906

Index L & A

	42.5		
10 15 .0	140.5 ← Comp. Star dis		
	234.2	99.7'	B
	311.9	77.7'	
		175.4'	+0.09'
	53.5		
	132.4	78.6'	+0.05'
	222.9	101.0'	
	323.9	179.6	+0.01'

Index R & B

	327.0		
	39.9	72.9'	A
	136.0	94.5'	
	230.5	167.7'	+0.23'
	316.0		+0.20'
	51.5	95.5'	
	145.6	75.4'	
	221.0	170.9'	+0.17'

10	26	50	
	41	50	
10	20	55	
5	+1	+27	
15	22	22	

Mean +0.12'

L.T. 14h 6m

H.A. +9 15

7341.6406 Dec. +80.5

P.A. 188.0 Ver B

Sprocket -1.5 A

" -0.5 B

" 0.0 b

It's watch used for times

It watch 1 m. 27 sec. slow

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1906phae.proj..580W

May 11, 1906 (Friday)

H Geminorum Phot. 3 H. Obs. Lowie Rec.

6 30 +16.5
10 55
4 25

9".5 brap

Index L & A

248.7 ← var. dis.

7 56 27

295.8	47.1'	B
78.4	31.2'	
109.6	78.3'	−2.25'
257.5		−2.26'
288.9	31.4'	
71.0	45.6'	
116.6	77.0'	−2.28'

Index R & B

A

163.0		
204.5	41.5'	
349.5	28.1'	
17.6	69.6'	−2.52'
169.0		−2.56'
197.54	28.4'	
343.3	39.2'	
22.5	67.6'	−2.59'

Mean −2.41'

8 8 50

15	64	77
7	62	38
5	+1	+30
13	4	8

7342.5445

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1906phae.proj...580W

May 11, 1906

S.J. 11 52
Ho. A. +5 20
Dec. +15.5
P. A. 160.0 Ser. B
Sprocket −4.5 A
" −3.5 B
" −3.0 b

79.1905 = R Scuti = 044880 Phot J Ht. Obs. Bowie Ser.

4	33	+81.0
12	33	
8	0	

For measurements see page 81.

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1906phae.proj..580M

May 11, 1906

Index 2 & A	Reject	
42.8 ←	bromp. star dis	
144.2	101.4	
233.2	78.5	
311.7	179.9	0.00
54.0		−0.02
133.0	79.0	
222.1	102.9	
325.0	181.9	
	178.1	−0.04
134.2		
235.9	101.7	
325.4	77.7	
43.1	179.4	+0.01
146.0		+0.06
222.3	76.3	
314.8	98.0	
52.8	174.3	+0.11
		+0.02

9 10 55

9 21 46

On examining region after taking above group found that one of stars was wrong, right star got into position and new group taken on fol. page. Reject above group

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1906phae.proj..580W

May 11, 1906

Index R & S

317.5 bamp. Star disc.

51.1	93.6'
145.8	76.0'
221.8	169.6' +0.20'

325.6 +0.18'

41.6	76.0'
136.0	95.0'
231.0	171.0' +0.17'

Index L & A

225.5

322.9	97.4'
54.2	77.7'
131.9	175.1' +0.09'

233.6 +0.06'

312.0	78.4'
43.3	99.6'
142.9	178.0' +0.04'

Mean +0.12'

9 36 38

9 47 48

83 86

9 41 73

5 +1 +30

14 43 43

S.J. 13 35

Hour +8 44

Dec +80.5

P.A. 7.9 per S

Sprocket −1.5 A

" −0.5 S.

" 0.0 b

7342.6137

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1906phae.proj..580M

May 11, 1906

R X Herculis Phot. J H. Obs. Bowie Rec.

18 16 +12.0
13 56
4 20
4 40

Full aperture used

Index R & A

245.9 ← var. dis.
300.4 54.5' A
74.2 37.2'
111.4 91.7' -1.87'

10 47 24

254.7 -1.84'
293.9 39.2'
67.0 54.2'
121.2 93.4' -1.82'

Index L & B

158.1
207.0 48.9' B
345.8 33.4'
19.2 82.3' -2.13'

166.0 -2.12
199.5 33.5'
337.3 49.6'
26.9 83.1' -2.10'

Mean -1.98'

10 57 54
104 78'
10 52 39'
5 +1 +30'
15 54 9'

7342.6626 Comp. Star for R X Herculis = +12° 3575 (B.7)

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1906phae.proj...580W

May 11, 1906.

S. T. 14^h 37^m
H. A. −3 50
Dec. +12.0
P. A. 150.2 Ver. B
Sprocket − 4.5 B
" − 3.5 b

Hawks watch used for times tonight
Hawks watch 1 m. 30 sec. slow

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1906phae.proj..580N

May 12, 1906 (Saturday)

Fourth Type Star +68°617 Phot. 3 Ft. Obs. Bowie Res

10	35	+68.2
13	00	
2	25	

Full aperture

Index L & A

165.4 6.6	4th type dis.	
201.0	34.4'	B
350.6	26.3'	
16.9	60.7'	−2.84'
170.0		−2.80'
196.6	26.6'	
346.3	36.1'	
22.4	62.7'	−2.76'

Index L & B

74.1		
114.2	40.1'	A
258.9	26.1'	
285.0	66.2'	−2.64'
81.2		−2.62
107.6	26.4'	
251.8	41.2'	
293.0	67.6'	−2.59'

Mean −2.71'

9	38	29
9	49	24
	87	53
9	43	56
5	+1	+33
14	45	29

7343.6150

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1906phas.proj...580M

May 12, 1906

S.J. 13 36
H.A. +2 55
Dec. +68.2
P.A. 239.6 Ser B
Sprocket -2.5 B
" -1.5 b

R X Hercules Phot J H. Obs Bowie Rec

18	16	+12.0
13	46	
4	30	
7	30	

Clouds now coming thickly from the east and covering all the sky No chance for anything further

It's watch used for times
Watch 1 m. 33 sec. slow

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1906phae.proj..580M

May 14, 1906 (Monday)

RR Draconis Phot. I H. Obs. Bouvier Rec

18	40	+62.6
11	20	
7	20	
4	40	

Index Ld A

δ 28 10

223.0	← Comp. Star dis	
333.2	110.2	
55.3	76.1	
131.4	186.3	
	173.7	−0.12
235.8		
311.9	76.1	−0.02
43.2	99.2	
142.4	175.3	+0.09

Index R & B

134.6		
230.9	96.3	
326.3	73.7	
40.0	170.0	+0.19
146.5		
220.3	73.8	+0.19
315.0	96.1	
51.1	169.9	+0.19

δ 39 46

In above group seeing extremely bad. After ending last set to R. found that wrong image (at last) was made to dis and it is probable that the same error carried to previous part of group at times, at least owing to merging of two discs to each other owing to the seeing. Owing to uncertainty above | +0.08

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1906phae.proj...580N

May 14, 1906

After waiting seeing improved somewhat

Index R & B

	137.0 ←	comp. Star dia	
8 59 7	227.5	90.5'	
	327.0	72.8'	B
	39.8	163.3'	+0.32'
	147.0	72.8'	+0.30'
	219.8	93.2'	
	316.7	166.0'	+0.27'
	49.9		

Index L & A

	43.0		
	142.3	99.3'	B
	234.8	76.5'	
	311.3	175.8'	+0.08'
	55.9	74.9'	+0.10'
	130.8	98.0'	
	224.0	172.9'	+0.13'
	322.0		

9	10	1
17	69	8
8	64	34
5	+1	+35
14	6	9

Mean +0.20'

S.T. 13h 10m

H.A -5 30

7345.5876 Dec +62.1

P.A 95.0 for B

Sprocket -2.5 B

" -1.5 b

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1906phae.proj..580M

May 14, 1906

R Sbcphei = 19.1905 = 044880 Phot J H. Obs Bonn Rc

4 33 +81.0
13 33
9 00

Index Corr

44.0 ← comp Star dis.
140.2 96.2'
235.8 74.2'
310.0 170.4' +0.18'

9 50 40 ⊗

54.9 +0.11'
129.8 74.9'
221.0 102.8'
323.8 177.7' +0.04'

Index R & ⊗

313.9
48.7 94.8' A
146.8 75.2'
222.0 170.0 +0.19'

328.0 +0.24'
38.3 70.3'
135.0 94.9'
229.9 165.2' +0.28'

Mean +0.18'

10 0 42
19 50 82
9 55 41
5 +1 +35
14 57 16

7345.6231

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1906phae.proj..580W

May 14, 1906

S. J. 13^h 59^m
H. A. +9 7
Dec. +80.5
P. A 187.5 Cen B
Sprocket − 1.5 A
" − 0.5 B
" 0.0 b

R X Herculis Phot J. H. Obs Bowie Rec.

18	16	+12.0
14	6	
4	10	9."5 bad
7	50	

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1906phae.proj..580M

May 14, 1906.

Index R & d

	245.0 ←	var. dia	d
10 31 35	298.0	53.0'	
	74.3	38.3'	
	112.6	91.3'	-1.88'
	253.6		-1.86'
	293.0	39.4'	
	66.3	53.5'	
	119.8	92.9'	-1.84'

Index ~~I~~ K ~~S~~

	156.1		
	207.2	51.1'	S
	344.7	35.5'	
	20.2	86.6'	-2.01'
	165.8		-1.98'
10 40 30	201.8	36.0'	
71 65'	337.8	52.2'	
10 35 62'	28.0	88.2'	-1.96'
5 +1 +35'			
15 37 37'			

Mean -1.92'

S. T. 14h 36m
R. A -3 51
Dec +12.0
P. A 149.0 Ker B
Sprocket -4.5 B
" -3.5 b

7345.6511

~~The watch used for times~~
~~Watch~~ 1m. 35 sec. slow

1906phae.proj..580W

May 15, 1906 (Tuesday)

R R Draconis Phot 3 Ht. Obs. Bowie Rec.

18	40	+62.6
11	15	
7	25	
4	35	

I

Some cloud in this region ~~twilight very strong~~

Index L & A

B

	255.5 ←	Comp. Star dis.	
δ 22 38	292.0	36.5'	
	79.4	23.8'	
	103.2	60.3'	+2.85'
			+3.02'
	260.7		
δ 31 8	283.3	22.6'	
	77.0	29.4'	
	106.4	52.0'	+3.18'

Index R & B

A

	169.9		
δ 36 32	196.4	26.5'	
	352.3	18.9'	
	11.2	45.4'	+3.49'
			+3.56'
	175.4		
δ 42 1	192.6	17.2'	
	350.5	25.3'	
	15.8	42.5'	+3.63'

	131	79'
8	32	65'
5	+1	+38'
13	34	43'

7346.5657

Mean +3.29'

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1906phae.proj..580N

May 15, 1906.

			Index R & B		II		
			167.7				
8	50	38	196.5		28.8'		A
			354.5		18.1'		
			12.6		46.9'	+3.41'	
			174.3			+3.49'	
8	56	38	192.7		18.4'		
			351.0		25.4'		
			16.4		43.8'	+3.57'	
			Index L & A				
			77.9				
9	3	14	106.5		28.6'		B
			263.5		17.8'		
			281.3		46.4'	+3.44'	
			84.0			+3.42'	
9	9	7	102.8		18.8'		
			257.2		28.7'		
			285.9		47.5'	+3.39'	
34	118	97			Mean	+3.46'	
8	59	54					
5	+1	+38					
14	1	32					

7346.5844

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1906phae.proj...580N

May 15, 1906.

Index Left

			79.9		III
9	15	58	104.4	24.5'	
			264.4	15.4'	B
			279.8	39.9'	+3.77'
			84.4		+3.64'
9	21	12	100.7	16.3	
			258.0	28.6'	
			256.6	44.9'	+3.51'

Index R & B

			357.0		
9	25	40	15.8	18.8'	
			175.2	15.2'	B
			190.4	34.0'	+4.13'
			354.7		+3.94'
9	30	16	10.6	15.9'	
			170.3	24.7'	
			195.0	40.6'	+3.74'

	91	126	
9	22	76	
5	+1	+38	
14	24	54	

Mean +3.79'

7346.6006

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1906phae.proj..580W

May 15, 1906.

Index R & S

	350.9		IV
9 37 23	16.4	25.5'	A
	173.3	18.1'	
	191.4	43.6'	+3.58'
	355.3		+3.69'
9 43 13	10.7	15.4'	
	170.0	24.0'	
	194.0	39.4'	+3.80'

Index L & A

	259.3		
9 48 22	285.6	26.3'	B
	83.6	18.6'	
	102.2	44.9'	+3.51'
	261.0		+3.38'
9 53 23	282.6	21.6'	
	77.2	29.0'	
	106.2	50.6'	+3.24'

181 81'

9 45 35'

5 +1 +38'

14 47 13'

Mean +3.54'

73 46.6161

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1906phae.proj...580M

May 15, 1906

Index L & A.

		257.6		
10	2	18	289.3	31.7' V
			82.0	20.5'
			102.5	52.2' +3.17'
			261.7	+3.06'
10	5	42	285.7	24.0'
			76.0	33.6'
			109.6	57.6' +2.95'

Index R & B

		164.9		
10	10	15	198.5	33.6'
			352.7	23.1'
			15.8	56.7' +2.99'
			170.5	+2.89'
10	13	50	195.0	24.5'
			344.6	37.3'
			21.9	61.8' +2.79'

	30	125	'
10	7	61	'
5	+1	+35	'
15	9	36	'

Mean +2.95'

Troubled a little in above group by light floating cloud

?346.6316

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1906phae.proj..580M

May 15, 1906

Index R&B

VI

160.8

10 19 52 — 203.0 — 42.2' — A

350.0 — 27.5'

17.5 — 69.7' — +2.52'

168.6 — +2.46'

10 24 10 — 195.8 — 27.2'

340.5 — 45.9'

26.4 — 73.1' — +2.41'

Index L&A

69.0

10 29 15 — 118.0 — 49.0' — B

255.0 — 34.6'

259.6 — 83.6' — +2.09'

75.0 — +2.04'

10 32 57 — 110.9 — 35.9'

104 134 — 248.4 — 51.4'

10 26 34 — 299.8 — 87.3' — +1.99'

5 +1 +38'

15 28 12'

Mean +2.25'

·7346.6445

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1906phae.proj..580W

May 15, 1906

Index L & A

VII

65.9

10 37 48	120.7	54.8'		
	254.0	36.7'		B
	290.7	91.5'	+1.87'	
	74.9		+1.89'	
10 41 2	110.3	35.4'		
	245.8	54.8'		
	300.6	90.2'	+1.91'	

Index R & B

	336.0			
10 45 15	32.8	56.8'		A
	164.0	37.8'		
	201.8	94.6'	+1.79'	
	345.4		+1.80'	
10 48 5	24.8	39.4'		
	156.0	54.6'		
	210.6	94.0'	+1.81'	

	171	70'	
10	42	62'	
5	+1	+38'	
15	44	40'	

Mean +1.84'

7346.6561

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1906phae.proj..580M

May 15, 1906

Index 2 & B

VIII

335.6

10 53 22 — 32.0 — 56.4' — B

162.3 — 39.2'

201.5 — 95.6' +1.77'

344.5 — +1.72'

10 56 10 — 24.8 — 40.3'

152.8 — 59.3'

212.1 — 99.6' +1.67'

Index 2 & A

240.7

11 0 12 — 307.6 — 66.9' — B

70.7 — 45.8'

116.5 — 112.7' +1.36'

250.6 — +1.34'

11 2 56 — 297.9 — 47.3'

59.2 — 67.4'

126.6 — 114.7' +1.31'

42	111	100
10	57	70
5	+1	+38
15	59	48

Mean +1.53'

7346.6666

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1906phae.proj...580N

May 15 1906

Index L & A

			239.6		IX
11	7	8	306.9	67.3'	
			68.5	51.3'	
			119.8	118.6'	+1.22'
			247.5		+1.16'
11	10	56	298.1	50.6'	
			56.2	73.2'	
			129.4	123.8'	+1.11'

Index Q & B

			147.9		
11	15	30	215.8	67.9'	
			339.1	46.8'	
			25.9	114.7	+1.31'
			158.0		+1.28'
11	17	48	206.0	48.0'	
	49	142	329.6	69.4'	
11	12	50	39.0	117.4'	+1.25'
5	+1	+38			
16	14	28			

Mean +1.22'

S.T. 15 16
H.A -3 23
Dec +62.1
R.A. 275.1 for B
Sprocket -2.5 B
" -1.5 b

7346.6768

It's watch used for times
Watch 1 m. 38 sec slow

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1906phae.proj..580N

May 16, 1906 (Wednesday)

8 15 ~~Much~~ cloud during early part of ~~the~~ evening clouds however a ~~short~~ time ago became more broken in ~~the~~ west indicating that possibly ~~something~~ could be done shortly, clouds now however thick everywhere and conditions growing worse much lightning in ~~the north~~ evidently no chance for any work.

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1906phae.proj...580N

May 18, 1906 (Friday)

R R Draconis Phot 3 Ht. Obs Bowie Rec

18	40	+62.6
11	30	
7	10	
4	50	

Index Lect

227.0 Comp. Star dis

8 12 10 318.3

60.6

125.1

237.0

8 16 58 307.8

Clouds 46.8

Because ~~the~~ somewhat cleared.
Tried for R R Draconis again see fol. page.

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1906phae.proj..580

May 18, 1906

Index Left

	226.7	Comp. Star dis.	
9 0 0	321.5	94.8'	9
	53.9	71.9'	
	125.8	166.7'	+0.25'
	236.4		+0.23'
9 1 47	310.0	73.6'	9
	44.8	95.2'	
	140.0	168.8'	+0.21'

Index Right

	140.3		
9 5 20	228.0	87.7'	9
	329.4	67.9'	
	37.3	155.6'	+0.47'
	148.2		+0.43'
9 7 28	217.4	69.2'	9
13 95	317.4	90.5'	
9 3 39	47.9	159.7'	+0.39'
5 -19			9/5
14 3 20			14
			+0.33'

7349.5847

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1906phae.proj...580N

May 18, 1906

			Index R & B	Same again
			319.0	
9	24	36	50.6	91.6'
			146.9	68.1' A
			215.0	159.7' +0.39'
			325.8	+0.40
9	28	56	37.0	71.2'
			137.9	87.6'
			225.5	158.8' +0.40'
			Index L & A	
			224.9	
9	34	13	322.6	97.7'
			55.0	78.5' B
			133.5	176.2' +0.07'
			234.6	+0.08
9	38	42	312.2	77.6'
			41.8	97.4'
			139.2	175.0' +0.09'
	124	147		
9	31	37		
5		-19		
14	31	18		Mean +0.24

7349.6051

S. I. 13 48
H. A. -4 52
Dec. +62.0
C. A. 95.0 Ver B
Sprocket -2.5 B
" -1.5 b

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1906phae.proj..580N

May 18, 1906

R X Hercules Phot. I to Obs Bonn Rec

18	16	+120
13	54	
4	22	
7	38	

9.5 bright

Index R & A

67.2 var. dis

118.0	50.8'	
253.5	39.7'	
293.2	90.5'	−1.90'

73.6		−1.54'
112.6	39.0'	
243.2	55.6'	
298.8	94.6'	−1.79'

10 7 38

Index L & B

337.8		B
25.4	47.6'	
166.4	34.2'	
200.6	81.8'	−2.14'

345.1		−2.08'
22.0	36.9'	
157.3	49.2'	
206.5	86.1'	−2.02'

Mean −1.96'

10	19	42	
	26	80	'
10	13	40	'
5		−19	'
15	13	21	'

7349.6342

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1906phae.proj...580W

May 18, 1906.

S. T. 14 28
H. A. -3 58
Sec. +12.0
P. A. 149.6 Ver
Sprocket -4.5
" -3.5

H's watch used for times
H watch 19 sec. fast

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1906phae.proj..580

May 19, 1906 (Saturday)

ζ Geminorum Phot. J H. Obs. Bowie Rec

6	30	+16.5
11	30	
5	00	

9.5 Cap

Abandoned telescope down in small shutters wen after 8.0 clock and cannot find way in finder to var. twilight still strong in this region. Twilight so strong and region so low that further observations of above var. will have to be delayed until it gets up in the east again

R R Draconis Phot. J H Obs. Bowie Rec

18	40	+62.6
12	18	
6	22	
5	38	

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1906phae.proj...586W

May 19, 1906.

Index L & A B

223.0 ← comp. Star dis

324.61	101.1'
54.5	75.0'
129.5	176.1' +0.07'

δ 25 52

233.9	+0.04'
310.6	76.7'
40.0	102.9'
142.9	179.6' +0.01'

Index R & B

133.1	
231.1	98.0' A
330.9	70.9'
41.8	168.9' +0.21'

148.5	+0.26'
219 6 8.5	70.0'
315 5 7.0	93.0'
50.50	163.0' +0.32'

Mean +0.15'

δ 36 40

61 92'

δ 30 76'

5 +17

13 31 33 S.T. 12h 55m

H.A. −5 45

Dec. +62.1

P.A. 275.4 var B

Sprocket −2.5 B

" −1.5 L

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1906phae.proj..580M

May 19, 1906.

R Sagittæ = 79.1905 = 044880 Phot. 3 H. Obs. Bowie Rec

4	33	+81.0
13	00	
8	27	

9 0 0 Clouds

9 12 0 Still cloudy in this region and becoming so at present over whole sky

9 26 0 Clouds more abundant again
Further observations prevented by clouds.

H's watch used for times.
Watch 17 sec. fast.

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1906phae.proj...580N

May 21, 1906. (Monday)

ζ ζ Draconis Phot. 3 St. Obs Bowie Rec.

18	40	+62.6
11	46	
6	54	
5	6	

Index L & A

41.5 ← comp. Star dia

8 19 46

143 02.6	101.1'	
235.8	73.9'	
309.7	175.0'	+0.09
55.6		+0.10'
131.45	75.9'	
224.8	98.2'	
323.0	174.1'	+0.11

Index R & B

313.8		
51.9	98.1'	
148.5	72.1'	
220.6	170.2'	+0.19
326.8		+0.22'
39.9	73.1'	
135.7	93.5'	
230.3 29.2	166.6	+0.25

Mean +0.16'

8 29 21

48 67'

8 24 34'

5 −31'

13 24 3'

7352.5583

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1906phae.proj..580N

May 21, 1906

S. T. 12^h 49^m
Hb. A. −5 51
Dec. +62.1
P. A. 275.1 Ver B
Sprocket −2.5 S
" −1.5 b

R X Herculis Phot. J H. Obs. Bowie Ra
15 16 +12.0
12 54
5 22
6 38

9.5 b caps used

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1906phao.proj...580N

May 21, 1906.

Index R & A

I

245.8 ← var. dia.

299.4	53.6'	
74.6	37.0'	A
111.6	90.6'	−1.90'

254.7		−1.84'
292.5	37.8'	
64.6	57.3'	
121.9	95.1'	−1.78'

Index L & B

156.9		
208.9	52.0'	
344.5	35.4'	B
19.9	87.4'	−1.98'

164.6		−1.96'
201.6	37.0'	
336.4	52.3'	
28.7	89.3'	−1.93'

Mean −1.90'

8 53 38

Ra 9 3 58

17	56	96
8	58	48
5		−31
13	58	17

1352.5821

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1906phae.proj..580

May 21, 1906.

Index L & B

II

158.4

9	12	2	207.8	49.4'
			343.7	36.8'
			20.5	86.2' -2.02'

165.3 -2.00'

9	15	40	201.6	36.3'
			336.3	51.6'
			27.49	87.9' -1.97'

Index Q & A

65.6

A

9	20	30	123.0	57.4'
			254.0	39.8'
			293.8	97.2' -1.73'

73.6 -1.71'

9	23	30	110.5	36.9'
			241.7	61.9'
			303.6	98.8' -1.69'

	70	102	
9	17	56	
5		-31	
14	17	25	

Mean -1.86'

7352.5954

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1906phae.proj..580M

May 21, 1906

Index R & A

III

63.7

9 30 55	128.2.9	59.2'		A
	253.4	39.6'		
	293.0	98.8'	-1.69'	
	73.5		-1.66'	
9 33 56	113.6	40.1'		
	2425	60.9'		
	303.4	101.0'	-1.63'	

Index L & B

	336.0			
9 38 42	30.2	54.2'		
	164.8	35.9'		B
	200.7	90.1'	-1.91'	
	343.1		-1.87'	
9 43 0	22.2	39.1'		
	156.5	54.2'		
	210.7	93.3'	-1.83'	

144 153'
9 36 38'
5 -31'
14 36 7'

Mean -1.76'

7352.6084

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1906phae.proj..580N

May 21, 1906

Index 2 & B

B

334.5
311.0 56.5' IV
164.7 36.4'
201.1 92.9' -1.84'

343.0 -1.82'
9 55 35 211.6 38.6'
155.0 56.3'
21 ~~0.8~~ 1.3 94.9' -1.79'

Index Q & A

242.9
10 0 40 304.3 61.4' A
72.5 39.4'
111.9 100.8' 1.64'

252.2 -1.63'
10 4 35 293.7 41.5'
62.5 59.8'
122.83 101.3' -1.62'

38 110 137
9 57 64
5 -31
14 57 33

Mean -1.72'

7352,6233

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1906phae.proj...580M

May 21, 1906

Index R&A V

		240.9		
10	13	48	304.4	63.5'
			72.4	41.1'
			113.5	104.6' -1.54'
			252.5	-1.58'
10	17	57	294.4	41.9'
			62.2	59.3'
			121.5	101.2' -1.63'

Index L&B

			154.0	
10	22	46	212.5	58.5'
			343.6	37.7'
			21.3	96.2' -1.75'
			165.1	-1.75'
10	25	45	201.0	35.9'
			332.2	60.5'
			32.87	96.4' -1.75'
	77	196'		
10	19	64'		
5		-31'		
15	19	33'		

Mean -1.66'

7352.6386

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1906phae.proj..580N

January 21 1906

Index L & B

VI

		336.3		
10	41	32	30.4	54.1'
			162.2	41.0'
			203.2	95.1' -1.78'
			342.5	-1.74'
10	44	46	23.0	40.5'
			154.0	58.0'
			212.0	98.5' -1.69'

Index R & A

		239.0		
10	50	5	307.2	68.2'
			71.2	42.9'
			114.1	111.1' -1.39'
			250.3	-1.42'
10	53	10	295.9	45.6'
			60.7	63.4'
			124.1	109.0' -1.44'
	188	93'		
10	47	23'		
5		-31'		
15	46	52'		Mean -1.58'

7352.6575

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1906phae.proj...580

May 21, 1906

Index R & A VII

240.1

11	6	44	304.4	64.3'
			70.4	43.3'
			113.7	107.6' −1.47'

250.5 −1.46'

11	9	34	295.7	45.2'
			61.0	63.8'
			124.8	109.0' −1.44'

Index L & B

150.0

11	13	14	215.4	65.4'
			341.0	43.7'
			24.7	109.1' −1.44'

161.5 −1.51'

11	16	38	205.1	43.6'
			332.4	59.6'
			32.0	103.2' −1.58'

	44	130
11	11	32
5		−31
16	11	1

Mean −1.48'

7352.6743

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1906phae.proj..580M

May 21, 1906

Index L & B

154.6 VIII

11 29 6	212.1	57.5'		B
	340.9	43.9'		
	24.8	101.4'	-1.62'	
	162.3		-1.62'	
11 31 57	204.6	42.3'		
	332.2	59.3'		
	31.5	101.6'	-1.62'	

Index R & A

62.0 A

11 35 14	125+4.9	62.9'	
	251.4	45.3'	
	296.7	108.2'	-1.46'
	71.5		-1.47'
11 37 20	115.1	43.6'	
	241.1	63.7'	
	304.8	107.3'	-1.48'

132 97'

11 33 24'

5 -31'

16 32 53

Mean -1.54'

S.S. 15 49

H.A. -2 36

It's watch used for times

It watch 31 sec. fast

7352.6895 Dec. +12.1

P.d 330_2 In B

Sprocket -4.5 B

-3.5 b

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1906phao.proj...580W

May 22, 1906 (Tuesday)

Fourth Zinfel Star – 1°2312 Phot. J H. Obs Bowie Rec

9	32	−0.5
12	17	
+2	45	

Full ap.

Index L & A

63.4 ← comp. Star dis.

8 17 15

122.6	59.2'	B
251.0	45.4'	
296.4	104.6'	+1.54'

70.5		+1.54'
114.9	44.4'	
242.1	60.4'	
302.5	104.8'	1.54'

Index R & B

332.8

32.9	60.1'	A
163.2	41.3'	
204.5	101.4'	+1.62'

342.0		+1.57'
25.8	43.8'	
151.0	62.0'	
213.0	105.8'	+1.52'

Mean +1.56'

8 23 48

40 13'

8 20 32'

5 −29'

13 20 3'

7353.5556

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1906phae.proj..580N

May 22, 1906

S.S. 12h 47m
H.A. + 3 0
Dec. −1.3
P.A. 211.5 for B
Sprocket −0.5 B
" +0.5 b

8 50.0 Sky now thickly cloudy everywhere.

9 10 Sky still remains thickly cloudy with no stars visible anywhere ~~apparently~~ no chance for anything further

~~H~~ s watch used for times
~~Hatch~~ 29 sec. ~~fast~~.

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1906phae.proj..580

May 24, 1906. Thursday.

Sky became somewhat clearer about 8.30 looking as if it was clearing up but a little later it looked still clearer but right away it began to be more
9 48 0 cloudy again and at the present time it is growing thick everywhere, evidently no chance for any work.

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1906phae.proj.1580w

May 26, 1906 (Saturday)

Determination of maximum angular separation in Phot. R ~~Quartz~~ prism running way up ~~the~~ tube and plane of images set parallel ~~to~~ equator

5	39	2.0	
		25.5	23.5
	40	12.0	
		35.5	23.5
	41	1.5	
		26.5	25.0
	42	9.0	
		33.5	24.5
	42	48.5	
	43	12.5	24.0
	43	46.0	
	44	10.0	24.0
	44	26.5	
		49.5	23.0
~~+3.0~~			
	46	16.5	
	"	40.5	24.0

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1906phae.proj...580W

May 26, 1906

5 47 6.5
30.0 23.5

47 45.0
clouds

23.5
23.5
25.0
24.5
24.0
24.0
23.0
24.0
23.5

9 | 215.0
4 | 23.88
5.97

As it was cloudy had to turn some distance off the meridian and even then clouds were troublesome, found also that plane of images was not parallel to equator Star used above was about 1.°5 south of equator.

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1906phae.proj..580W

May 26, 1906

Sky now cleared another star (on the equator) adopted, star about on the meridian and plane of images set more nearly parallel to equator, previous series rejected and following series adopted

6	0	52.8	
	1	17.5	24.7
	2	2.5	
		26.5	24.0
	2	56.5	
	3	21.0	24.5
	3	51.5	
	4	16.0	24.5
	4	54.0	
	5	18.5	24.5
	5	56.0	
	6	21.0	25.0
	7	6.5	
		31.0	24.5
	8	0.7	
		24.7	24.0

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1906phae.proj...586N

May 26, 1906

6	8	53.5	
	9	18.0	24.5
~~+0~~		~~0.2~~	
	10	47.2	
		11.5	24.3

24.7
24.0
24.5
24.5
24.5
25.0
24.5
24.0
24.5
24.3

10 | 244.5

4 | 24.45

6.11

24.45
15

12225
2445

60 | 366.75 | 6.112
360

67
60

75
60

150
120

∴ Angular Separation of images in Phot. R. is 6' 7".

Dec. circle in above series reads −0.°8 but there is a correction to circle of about +0.°8 so that star used in above series was practically right on the equator.

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1906phae.proj...580M

May 29, 1906 (Tuesday)

R R Draconis Phot. I St. Obs. Bruce Rec.

18	40	+62.6
12	18	
6	22	
5	38	

Abandoned

Z Herculis Phot. I St. Obs. Bruce Rec.

17	35	+16.0
13	00	
4	35	
7	25	

Measurements on fol. pages

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1906phae.proj...580w

May 29, 1906.

Index Lick

253.4 ← var. dis

I

δ 39 24	295.7	42.3 v		
	77.0	31.2 v		B
	108.2	73.5 v	−2.39 v	
	258.0			
δ 42 52	288.7	30.7 v	−2.34 v	
	70.5	43.3 v		
	113.8	74.0 v	−2.32 v	
	Index R & B			
	160.8			
δ 46 34	203.2	42.4 v		
	350.8	28.1 v		A
	18.9	70.5 v	−2.49 v	
	167.8		−2.47 v	
δ 49 50	196.1	28.3 v		
	342.6	43.5 v		
	26.1	71.8 v	−2.47 v	

Mean −2.42 v

	176	160
δ	44	40
5		−21
	13	44 19

7360.5724

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1906phae.proj...580M

May 29, 1906

Index Q & B

II

159.7
202.2 42.5 v
350.1 29.2 v
19.3 71.7 v −2.4 v

A

8 57 5

167.7 −2.2 v
196.1 28.4 v
343.5 39.5 v
23.0 67.9 v −2.4 v

9 0 45

Index L & A

71.9
114.5 42.6 v
257.4 30.8 v
288.2 73.4 v −2.0 v

B

9 4 56

77.9 −2.3 v
107.9 30.0 v
250.9 45.3 v
296.2 75.3 v −2.3 v

9 . 7 48

35 68 157
6 62 39
5 −21
14 2 18

−2.4 v

7360.5849

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1906phae.proj...589W

May 29, 1906

Index L & A

III

70.0

9 14 5

113.4 43.4 ✓

257.8 31.7 ✓

289.5 75.1 ✓ −2.34 ✓

77.1 −2.32 ✓

9 16 56

108.5 31.4 ✓

251.4 44.9 ✓

296.3 76.3 ✓ −2.31 ✓

Index R & B

342.3

9 21 $\frac{2}{37}$

25.3 43.0 ✓ A

167.4 30.2 ✓

197.6 73.2 ✓ −2.40 ✓

349.5 −2.43 ✓

9 23 58

19.0 29.5 ✓

161.8 41.8 ✓

203.56 71.3 ✓ −2.46 ✓

74 146

9 18 66

5 −21

14 18 45

−2.34 ✓

7360.5964

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1906phae.proj..580M

May 29 1906

IV

Index R & B.

342.1

9 32 34	24.5	42.4'	
	167.1	29.7'	
	196.8	72.1'	-2.44"

349.0 -2.44"

9. 37 48	19.1	30.1'	
	161.1	42.2'	
	203.3	72.3'	-2.43"

Index L & A

250.0

9 43 37	293.0	43.0'	
	77.2	31.1'	
	108.3	74.1'	-2.37"

257.6 -2.40"

9 47 0	287.3	29.7'	
	72.5	42.5'	
	115.0 ~~113.9 4.4~~	72.2'	-2.43"

-2.42"

	159	119'
9	39	75'
5		-21'
14	39	54'

7360.6110

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1906phas.proj...580

May 29, 1906

Index Tube

250.0 V

9 57 22

294.5 44.5 ✓ (B)
78.4 29.5 ✓
107.9 74.0 ✓ −2.3K ✓

258.0 −2.36 ✓

10 0 42

287.3 29.3 ✓
69.5 46.0 ✓
115.5 75.3 ✓ −2.3K ✓

Index Tube

161.1

10 4 16

203.8 42.7 ✓ (A)
349.4 27.7 ✓
171 70.4 ✓ −2.4g ✓

169.0 −2.4g ✓

10 7 48

196.9 27.9 ✓
341.6 42.7 ✓
24.3 70.6 ✓ −2.4g ✓

39 68 128
9 62 32
5 −21
15 2 11

Mean −2.42 ✓

7360.6265

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1906phae.proj..580M

May 29, 1906

Index R&B VI

	161.2		
10 21 45	204.1	42.9"	A
	347.5	32.1"	
	19.16	75.0"	−2.3"
	167.8		
10 25 25	198.8	31.0"	−2.3"
	341.4	42.0"	
	23.4	73.0"	−2.4"

Index L&A

	71.5	42.1"	
10 30 40	113.6		
	257.2	29.6"	B
	286.8	71.7"	−2.4"
	78.6	29.4"	−2.4"
10.34 10	108.4		
110 120	250.0	42.9"	
10 27 60	292.5 2.9	72.7"	−2.42"
5 -21			
15 27 39			−2.41"

7360.6442

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1906phae.proj...580W

May 29, 1906

Index L & A

	70.6		
10 42 10	112.6	K 2.0	
	258.6	2A.3	B
	286.9	70.3	-2.50
	77.5		
10 46 25	108.0	30.5	-2KK
	251.5	K.3.5	
	295.0	74.0	-2.3A

Index Q & B

	343.0	K1.0	
10 51 52	24.0		A
	165.0	2A.5	
	196.5	69.5	-2.52
	349.5	29.5	-2KA
10 54 50	19.3		
193 137	160.5	K2.K	
10 48 49	202.9	71.9	-2KK
5 -21			
15 48 28			

Mean -2.46

7360.6586

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1906phae.proj..580M

May 29, 1906

Index R & B

VIII

3425

11 0 10 — 25.10 — 42.5 — A
167.8 — 28.1
195.9 — 70.6 — −2.9

350.1 — −2.0

11 3 12 — 19.2 — 29.1
162.0 — 40.9
202.9 — 70.0 — −2.1

Index L & A

252.6

11 6 24 — 293.2 — 40.6 — B
78.0 — 29.9
107.9 — 70.5 — −2.9

258.4 — −2.6

11 10 8 — 287.8 — 29.4
19 54 — 71.4 — 43.4
11 4 58 — 114.8 — 72.8 — −2.2
5 −21
16 4 37

Mean −2.4

7360.6698

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1906phae.proj...580W

May 29, 1906

Index L & A

IX

250.6

11 20 15 — 293.6 — 43.0 ✓

79.1 — 29.0 ✓

108.1 — 72.0 ✓ — −2.44 ✓

B

258.1 — −2.42 ✓

11 22 48 — 287.8 — 29.7 ✓

70.7 — 43.7 ✓

114.4 — 73.4 ✓ — −2.40 ✓

160.0

11 26 23 — 203.3 — 43.3 ✓

349.6 — 27.5 ✓

17.1 — 70.8 ✓ — −2.48 ✓

A

169.6 — −2.52 ✓

11 28 23 — 196.6 — 27.0 ✓

342.0 — 41.0 ✓

23.50 — 68.0 ✓ — −2.57 ✓

96 109

11 24 27

5 −21

16 24 6 — S.T 16h 20m

H.A −1 35

Mean −2.47 ✓

7360.6834 Dec +14.5

P.A 293.0

Sprocket −2.5 A

" −1.5 B

" −1.0 b

H's watch used for times

Watch 21 sec. fast

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1906phae.proj..580M

May 30, 1906. (Wednesday.)

8 50 Sky has been for some time practically clear yet though the first of evening it was pretty clear yet now the clouds are coming in heavy masses, these masses being continuous everywhere with no probable signs of clearing

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1906phae.proj..580

June 4. 1906 (Monday).

Seniors here Thursday, Friday and Saturday nights, May 31. June 1 and June 2.

Showed them the Moon with the Equatorial and explained the working of the dome, telescope and ~~this~~ Observatory work, in general.

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1906phae.proj..580M

June 4, 1906 (Monday)

Fourth Type Star + 36° 3243 Phot. 3 H. Obs. Bowie Rec

18	40	+37.4
12	50	
5	50	
6	10	

Index L & A

144.8	← 4th type dis.	
220.5	75.7'	B
335.9	55.1'	
31.0	130.8'	-0.96'
154.0		-0.92'
213.0	59.0'	
143.8	75.4'	
219.2	134.4'	-0.89'

Index R & S

232.4		A
313.4	81.0'	
61.7	63.2'	
124.9	144.2'	-0.69'
242.0		-0.67'
306.1	64.1'	
51.0	82.2'	
133.2	146.3'	-0.65'

Mean -0.80'

8 35 30

8	48	33
	86	63
8	43	32
5		-11
13	43	21

7366.57 18

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1906phae.proj...580W

June 4, 1906

S.J. 14 3
H.A. - 4 37
Dec. +36.2
P.A. 236.5 ver B
Sprocket +0.5 B
" +1.5 b

Fourth Type Star -13° 3407 (8.5)

11	31	-12.4
14	11	
2	40	

Abandoned. Cloudy. Moon bright.

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1906phae.proj..580W

June 4, 1906

Fourth Type Star +65° 617 Phot. J Hk. Obs. Lowe Rec

10	32	+69.9
14	32	
4	00	

Index L & A

B

347.7 4th ~~type~~ obs

19.1	31.4'	
171.3	23.2'	
194.5	54.6'	-3.07'

9 34 45

352.5		-3.02'
16.3	23.8'	
166.7	33.4'	
200.1	57.2'	-2.97'

Index R & B

A

253.7		
291.4	37.7'	
80.4	26.2'	
106.6	63.9'	-2.72'

260.1		-2.70'
287.5	27.4'	
73.6	37.4'	
111.0	64.8	-2.68'

Mean -2.86'

9	42	32
	76	77'
9	38	38'
5		-11'
14	38	27'

7366.6100

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1906phae.proj...580

June 4, 1906

Sky in this region pretty clear when above group was taken; before images were set however (after measurements) sky in this region became so cloudy that stars could not be found so that H.D.'s, Sprockets etc could not be read. Region however thoroughly identified before beginning

Fourth Type Star +70° 644 Phot J Hr Obs Davis Rec

11	23	+70.1
15	23	
4	0	

Measurements on fol. page.

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1906phae.proj..580M

June 4, 1906

Index R & A

47.4 ← Comp. Star dec.

140.8	93.4'	
238.7	69.1'	A
307.8	162.5'	+0.33'

58.4 +0.29'

127.9	69.5'	
222.6	97.5'	
320.1	167.0'	+0.25'

Index L & B

322.7

42.7	80.0'	
153.5	61.2'	B
214.8	141.3'	+0.75'

334.5 +0.76'

33.5	59.0'	
142.5	80.6'	
223.1	139.6'	+0.75'

Mean +0.52'

10 32 46

58 62

10 29 31

5 -11

15 29 20

S.T. 15 45

H.A. +4 50

7366.6453 Dec. +70.2

R.A. 155.3 Ben. B

Sprocket -4.5 B

" -3.5 b

It's watch used for times

Watch 11 sec. fast

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1906phae.proj...580

June 7. 1906. (Thursday).

Fourth Type. +64° 617 H. obs.

~~Y + A~~ R + B.

	25 K.A	36.4'		
9 40	291.2			
	A0.2			A
	106.0	2V.A' / 62.2	-2.7A'	
	2V9.9			
	247.4	27.V'		-2.7K'
	73.A			
	110.7	36.9' / 64.K'	-2.7O'	
	Y + A			
	3KA.0			
	19.0	31.0'		
	170.A			B
	194.1	23.3' / V4.3'	-3.0Y'	
	3V-3.0			
9 VA	17.0	24.0'		-3.0K'
9 8'	166.7			
9 49'	199.2	32.V' / V6.V'	-3.00'	
5 0				
14 49'	Region identified.		Mean -2.89'	

7369.6174

1906phae.proj..580N

June 7. 1906.
Fourth Type +40° 4210 Phot. I. Hr. obs.

Index below.

13K.6
22K.1 93.V ✓
321.9
40.0 78.1 / 171.6 ✓ +0.16 ✓

149.6
222.0 72.K ✓ +0.17 ✓
31K.1
V2.0 97.9 / 170.3 ✓ +0.1K ✓

Index above

229.0
310.1 K1.1 ✓
46.9
141.7 9K.K / 17V.9 ✓ +0.0K ✓

222.0
32K.0 102.0 ✓ +0.06 ✓
V2.6
12K.1 7VV / 177.V ✓ +0.0V ✓

+0.12 ✓

Region identified.

7369.6389

Hr's watches used for times.
Watch 6 secs. fast.

10 / 9 12

10 / 9 29

41
10 20
5 0
15 20

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1906phae.proj...58W

June 11 1906 (Monday)

RR Draconis Phot. 3 H. Obs. Bowie Rec

18	40	+62.6
13	30	
5	10	
6	50	

Cloudy first part of the evening. Clouds moved off region of above var. slowly

B

Index Left

	comp, Star dis.	
223.0		
318.8	95.8'	
56.0	73.4'	
129.4	169.2'	+0.20

8 36 40

235.3		+0.14
310.8	75.5'	
42.0	100.9'	
142.9	176.4'	+0.07

Index Right.

A

134.5		
230.9	96.4'	
328.0	69.5'	
37.5	165.9'	+0.27

148.3		+0.26
218.4	70.1'	
314.8	97.5'	
52.3	167.6'	+0.24

Mean +0.20

8	45	44
	81	84
8	40	72
5		0
13	41	12

7373 5702

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1906phae.proj..580W

June 11, 1906

S J. = 14^h 30m
H. A -4 12
Dec. +620
P. A. 274.9 Ist B
Sprocket -2.5 B
" -1.5 b

Z Herculis Phot. 3 St. Obs. Bowie Rec.

17	51	+14.5
14	36	
3	15	
6	45	

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1906phae.proj...580N

June 11, 1906.

Index Ld

	71.8	var. dis	
9 18 50	112.3	40.5'	
	260.1	26.3'	
	286.4	66.8'	−2.61" B
	79.7		−2.56"
	105.7	26.0'	
	249.3	44.2'	
	293.5	70.2'	−2.50"

Index Rad

	342.4		
	23.1	40.7'	A
	170.4	25.8'	
	196.2	66.5'	−2.62"
	350.2		−2.64"
9 30 14	16.6	26.4'	
48 64	162.3	38.9'	
9 24 32	201.82	65.3'	−2.67"
5 0			
14 24 32	D. 15	15	Mean −2.60"
	H.A. −2	41	
7373.6004	Dec. +14.5		
	R.A. 292.1		
	Sprocket −2.5 A		
	" −1.5 B		
	" −1.0 C		

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1906phae.proj..580N

June 11, 1906.

R X Hercules Phot. 3 ft. Obs. Bowie Rec.

18	16	+12.0
15	26	
2	50	9.5 bags.
9	10	

Index Right

245.6 ←	var. dis.	A
299.5	53.9 ✓	
76.1	35.9 ✓	
112.0	89.8 ✓	-1.92 ✓
255.2		-1.91 ✓
289.8	34.6 ✓	
65.2	55.8 ✓	
121.0	90.4 ✓	-1.90 ✓

Index Left

158.2		B
206.8	48.6 ✓	
345.2	34.4 ✓	
19.6	83.0 ✓	-2.11 ✓
166.0		-2.09 ✓
200.3	34.3 ✓	
336.8	50.1 ✓	
26.9	84.4 ✓	-2.07 ✓

Means -2.00 ✓

10 16 57

10 38 28

54 85

10 27 42

5 0

15 27 42

7373.6442

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1906phae.proj..580w

June 11, 1906.

S. J.	16	14
H. A	-2	13
Dec	+12.0	
P. A	149.5	Ver B
Sprocket	-4.5	B
"	-3.5	b

α Ophiuchi Phot. 3 Hr. Obs Bowie Rec.

17	9	+1.4
16	29	
	40	
11	20	

7" Crap used

Measurements on fol. page.

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1906phae.proj..580W

June 11, 1906.

Index R & A

64.3 ← var. dis.

11 24 50	121.0	56.7'	A
	229.5	85.3'	
	314.5	142.0'	-0.73'
	51.8		-0.74'
	136.3	84.5'	
	245.2	57.1'	
	302.3	141.6'	-0.74'

Index L & B

	337.0		B
	32.7	55.7'	
	145.7	72.8'	
	218.5	128.5'	-1.01'
	323.6		-0.96'
11 33 45	41.6	78.0'	
57 98'	156.8	54.8'	
11 28 79'	211.6	132.8'	-0.92'
5 0'			
16 29 19'		Mean	-0.85'

7373.6870

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1906phae.proj...560w

June 11, 1906.

Index L & B

336.0

11 43 40

30.2	54.2'	B
147.0	74.8'	
221.8	129.0'	−1.00'

323.6 −0.96'

43.0	79.4'	
155.9	53.6'	
209.5	133.0'	−0.92'

Index R & A

245.3

299.7	54.4'	A
50.0	87.1'	
137.1	141.5'	−0.74'

234.0 −0.83'

11 50 58

312.0	78.0'	
65.8	54.8'	
120.6	132.8'	−0.92'

93 98'

11 46 79'

5 0'

16 47 19 S.S. 17h 32m Mean −0.90'

H.A. +0 19

7373.6995 Dec. +1.0

P.A. 35.0 Ver. B His watch used for times

Sprocket −8.5 B Hatch 0

" −7.5 b

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1906phae.proj..580W

June 12, 1906 (Tuesday)

Q Q Draconis Phot. I H. Obs. Bowie Rec.

18 40 +62.6
13 25
5 15
6 45

Index Left

	42.1 ←	comp. Star dis	
8 22 58	142.9	100.8 v	B
	233.8	74.6 v	
	308.4	175.4 v	+0.09'
	56.3		+0.09'
	131.8	75.5 v	
	222.0	99.5 v	
	321.5	175.0 v	+0.09'

Index Right

	312.9		
	49.8	96.9 v	A
	147.0	68.0 v	
	215.0	164.9 v	+0.29'
	326.2		+0.25'
8 32 0	38.2	72.0 v	
54 58	134.5	96.8 v	
8 27 29	23 ~~21.8~~ 1.3	168.8 v	+0.21'
5 +4			
13 27 33			

Mean +0.17'

7324.5608

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1906phae.proj..560w

June 12, 1906.

S.T. 14^h 18^m
H.A. -4 22
Dec. $+62.0$
P.A. 275.0 Var B
Sprocket -2.5 B
" -1.5 b

Z Herculis Phot. 3 Ht. Obs. Bowie Res.

17	51	+14.5
14	31	
3	20	
8	40	

For measurements see fol. page

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1906phae.proj..580M

June 12, 1906

Index L & A

249.1 ← var. dia.		
299.0	49.9'	B
73.0	37.9'	
110.9	87.8'	-1.97'
253.5		-1.96'
290.7	37.2 ✓	
66.9 ~~67.0~~	52.0 ✓	
118.9	89.2 ✓	-1.94'

Index R & S

154.5		
212.2	57.7 ✓	A
346.3	34.7 ✓	
21.0	92.4 ✓	-1.85'
165.0		-1.88'
203.3	38.3 ✓	
337.6	51.8 ✓	
29.4	90.1 ✓	-1.91'
	Mean	-1.92'

9 5 28

9 12 51

17 79'

9 8 70'

5 +4'

14 9 14'

B 74.5897

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1906phae.proj..560w

June 12, 1906

			Index R+B	Same again	
			157.6		
9	26	57	207.3	49.7'	
			344.0	37.2'	
			21.2	86.9'	-2,00'
			165.1		-1.98'
9	~~29~~	20	201.4	36.3'	
			337.0	51.9'	
			28.9	88.2'	-1.96'
			Index L & A		
			74.5		
9	33	10	113.2	38.7'	
			245.0	52.5'	
			297.5	91.2'	-1.88'
			~~66.8~~		
~~9~~	~~35~~	~~25~~	Reject ~~119.3~~		-1.83'
			unable to finish; clouds ~~253.0~~		
			72.8		
9	43	23	112.5	39.7'	
			245.1	55.3'	
			300.4 ~~299.6~~	95.0'	-1.78'
	131	110			
9	32	72			
5		+4			
14	33	16			
				Mean	-1.90'

7374.6064

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1906phae.proj..580W

June 12, 1906

S. J. 15^h 29^m
H. A. −2 25
Dec. +14.5
C. A. 112.0 Ker 8
Sprocket −2.5 A.
" −1.5 B
" −1.0 b

R X Herculis Phot. 3 H. Obs. Bowie Rec.

18	16	+12.0
15	36	
2	40	
9	20	

9."5 bar used

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1906phae.proj...500W

June 12, 1906.

Index Right

	68.0 ← var. dis.		
10 14 25	121.0	53.0'	A
	253.4	36.9'	
	290.3	89.9'	-1.92'
	75.3		-1.93'
	111.6	36.3'	
	245.6	52.7'	
	298.3	89.0'	-1.94'

Index Left

	335.9		
	26.7	50.8'	B
	164.9	34.1'	
	199.0	84.9'	-2.05'
	345.5		-2.02'
10 26 19	21.0	35.5'	
40 44	156.5	51.2'	
10 20 22	207.7	86.7'	-2.00'
5 +4			
15 20 26			Mean -1.98'

S.J. 16 11

H.A. -2 15

7374.6392 Dec. +12.0

P.A. 149.6 Var B

Sprocket -4.5 B

" -3.5 b

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1906phae.proj..580M

June 12, 1906.

α Ophiuchi Phot. J - H. Obs. Bowie Rec

17	9	+1.4
16	16	
− 0	53	
+11	7	

7" bap used

Index R & A

230.5 ←	var. dis.	
312.8	82.3'	A
67.9	51.8'	
119.7	134.1'	−0.89'
245.0		−0.86'
295.9	53.9'	
51.6	83.7'	
135.3	137.6'	−0.82'

Index L & B

146.9		B
218.0	71.1'	
334.9	53.2'	
28.1	124.3'	−1.10'
158.7		−1.08'
208.5	49.8'	
324.3	76.3'	
40.6	126.1'	−1.06'

Mean −0.97'

10 51 36

10 58 57

109 93'

10 54 76'

5 +4'

15 55 20

7374.6634

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1906phae.proj..580W

June 12, 1906.

Index L & B

	158.7		
11 7 38	209.1	50.4'	
	325.6	73.4'	
	39.0	123.8'	-1.11' B
	147.8		-1.12'
	218.7	70.9'	
	336.8	52.4'	
	29.2	123.3'	-1.12'

Index R & A

	64.8		
	122.6	57.8'	
	233.3	78.9'	
	312.2	136.7'	-0.84' A
	56.5		-0.89'
11 16 32	131.5	75.0'	
	242.8	56.7'	
	299.5	131.7'	-0.94'

	23 70		
11	11 65		
5	+4		
16	12 9	S. T. 17h	1m Mean -1.00'
		R. A. -0	12
7374.6751		Dec. +1.0	
		P. A. 35.4 Ver B	It's watch used for times
		Sprocket -8.5 B	Watch 4 sec. slow
		" -7.5 L	

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1906phae.proj..580M

June 13, 1906 (Wednesday)

Fourth Zyfer Star – 13 3407 (8.5) Phot. J. K. Obs. Bowie Rec

11	31	-12.4
13	31	
2	0	

Full 6" aperture used

Comp. Star = –13° 3406 (A6)

Index Left

219.0 ← b comp. Star dis.

8 26 b	327.2	108.2'
	52.8	81.7'
	134.5	189.9'
		170.1' – 0.19'

B

	231.5	
	313.6	82.1' – 0.20'
	36.3	109.7'
	146.0	191.8'
		168.2' – 0.22'

Index R & B

	127.8	
	238.0	110.2'
	322.0	79.5'
	41.5	189.7'
		170.3' – 0.18'

A

	142.6	
8 34 20	223.9	81.3' – 0.17'
60 26'	309.0	107.0'
8 30 13'	56.0	188.3'
5 +7'		171.7' – 0.16'
13 30 20'		

Mean – 0.18'

7375.5627

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1906phae.proj..580W

June 13, 1906

S. T. 14^h 24^m
H. A. + 2 53
Dec. −13.6
P. A. 175.5
Sprocket +0.5 B
" +1.5 b

R X Herculis Phot. J H. Obs, Bowie Res.

18	16	+12.0
14	36	
3	40	
8	20	

9.5" b ap used

9 30 0 b louds

Measurements on fol. page.

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1906phae.proj..580W

June 13, 1906.

Index Left

	156.8 ←	var. dis.
10 2 44	207.6	50.8'
	344.0	33.9'
	17.9	84.7' −2.06"
	167.0	−2.14"
	198.9	31.9'
	337.2	47.2'
	24.4	79.1' −2.22"

Index Right

	67.5 ~~66.2~~	
	115.0	47.5'
	255.4	35.6'
	291.0	83.1' −2.10"
	74.1	−1.97"
	111.3	37.2'
	243.8	55.4'
	299.2	92.6' −1.84"

10	26	15
	28	59
10	14	30
5		+7
15	14	37

Mean −2.06

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1906phae.proj...590w

June 13, 1906

	Index Right		Same again
	66.4		
10 36 24	117.6	51.2'	
	254.2	39.0'	
	293.2	90.2'	-1.91' A
	75.5		-1.96'
	110.3	34.8'	
	247.2	51.7'	
	298.9	86.5'	-2.01'

	Index Left		
	335.0		
	25.8	50.8'	
	166.9	32.1'	
	199.0	82.9'	-2.11' B
	345.4		-2.10'
	19.4	34.0'	
	159.0	49.8'	
	208.8	83.8'	-2.08'

10	46	34	
	82	58	
10	41	29	
5		+7	
15	41	36	

Mean -2.03'

S.T. 16h 42m
H.A. -1 43
Dec. +12.0
P.A. 150.0 Ver B
Sprocket -4.5 B
" -3.5 b

7375.6539

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1906phae.proj..580M

June 13, 1906

17	9	+1.4
16	47	
0	22	
11	38	

More clouds coming, abandoned

H's watch used for times
H watch 7 sec. slow

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1906phae.proj...590W

June 14, 1906 (Thursday)

Z Herculis Phot 3 Ht Obs Bowie Res

17 51 +14.5
13 41
4 10
7 50

I

Index L & A

254.8 ← var. dis

8 39 50

297.0 42.2'
79.0 31.8'
110.8 74.0' -2.38'

260.4 -2.37'

8 42 23

290.9 30.3'
72.8 44.2'
117.0 74.5' -2.36'

Index R & B

152.2

8 45 53

206.4 54.2'
358.2 26.6'
18.8 80.8' -2.17'

172.0 -2.30

8 48 14

199.2 27.2'
343.2 44.9'
28.1 72.1' -2.44'

174 140'
8 43 65'
5 +7'
13 44 12

Mean -2.34'

7376.5723

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1906phae.proj..580W

June 14, 1906

Index R & B

		163.1		II
8	53	2	206.0	42.9' A
			353.2	27.3'
			20.5	70.2' -2.50'
			171.4	-2.48
8	55	23	199.1	27.7'
			344.5	43.3'
			27.8	71.0' -2.47'

Index L & A

			70.0	
8	58	28	117.9	47.9' B
			260.0	29.4'
			289.4	77.3' -2.28'
			80.8	-2.28'
9	0	58	110.3	29.5'
			250.5	47.7'
			298.2	77.2' -2.28'

33	166	111
8	56	58
5		+7
13	57	5

Mean -2.35'

7376.5813

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1906phae.proj...590W

June 14, 1906

B

III

Index Lad

		72.8		
9	12	43	116.1	43.3'
			260.7	28.3'
			289.0	71.6' -2.47'
			80.7	-2.44'
9	15	30	110.1	29.4'
			253.6	43.1'
			296.7	72.5' -2.43'

Index R&B

		343.8		
9	20	10	27.5	43.7'
			170.4	27.3'
			197.7	71.0' -2.47'
			352.3	
9	23	10	20.6	28.3' -2.42'
			163.0	42.3'
			205.3	70.6' -2.49'

A

	70	93	'
9	17	53	'
5		+7	'
14	18	0	'

Mean -2.46'

7376.5958

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1906phae.proj..580N

June 14, 1906

Index R & S

	344.2			IV
9 31 40	28.1	43.9		
	171.1	27.2		A
	198.3	71.1	-2.47	
	351.2		-2.43	
9 34 24	20.8	29.6		
	162.3	44.1		
	206.24	73.7	-2.39	

Index L & A

	253.7			
9 38 18	296.0	42.3		
	80.2	29.8		B
	110.0	72.1	-2.44	
	260.5		-2.37	
9 41 2	290.8	30.3		
	72.0	46.2		
	118.2	76.5	-2.20	

	144	84	
9	36	21	
5		+7	
14	36	28	

Mean -2.40

7376.6086

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1906phae.proj...590W

July 14, 1906

		Index L & A			B
		253.4			V
9	50 28	296.7	43.3'		
		80.7	29.3'		
		110.0	72.6'		-2.42'
		261.4			-2.41'
9	53 57	289.3	27.9'		
		72.0	45.3'		
		117.3	73.2'		-2.40'
		Index R & B			
		163.4			
9	57 35	207.4	44.0'		A
		351.6	28.2'		
		19.8	72.2'		-2.43'
		171.0			-2.44'
10	0 35	198.6	27.6'		
		343.3	44.1'		
		27.4	71.7'		-2.45'
37	160 155				
9	55 39				
5	+7				
14	55 46			Mean	-2.42'

7376.6221

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1906phae.proj..580

June 14, 1906

Index R & ⊗ VI

	162.8		
10 7 48	206.8	44.0	
	352.7	27.9	A
	20.6	71.9	−2.44
	170.4		−2.42
10 11 17	199.4	29.0	
	342.8	44.0	
	26.98	73.0	−2.41

Index L & A

	72.7		
10 15 45	118.2	45.5	
	261.2	26.4	⊗
	287.6	71.9	−2.44
	81.9		−2.40
10 19 2	110.2	28.3	
	251.3	46.2	
	297.5	74.5	−2.36

	52	112
10	13	28
5		+7
15	13	35

Mean −2.41

7376.6344

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1906phae.proj..580M

June 14, 1906.

Index L & A

VII

	253.1		
10 26 30	296.3	43.2'	B
	82.2	27.7'	
	109.9	70.9'	-2.48'
	260.3		-2.46
10 29 35	288.7	28.4'	
	72.9	44.1'	
	117.60	72.5'	-2.43'

Index R & B

	164.0		
10 33 30	206.2	42.2'	A
	351.9	27.0'	
	18.9	69.2'	-2.53'
	171.0		-2.51'
10 36 58	199.4	28.4'	
	344.0	42.1'	
	26.1	70.5'	-2.49'

	124 153	'
10	31 38	'
5	+7	'
15	31 45	'

Mean -2.48'

7376.6471

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1906phae.proj..580M

June 14, 1906

Index R & B VIII

		164.5		
10	47	40	205.2	40.7' A
			350.7	28.6'
			19.3	69.3' -2.53'
			170.7	-2.54'
10	50	35	198.0	27.3'
			344.5	41.1'
			~~26.0~~ 5.6	68.4' -2.56'

Index L & A

			74.4	B
10	56	8	117.4	43.0'
			260.6	28.2'
			288.8	71.2' -2.47'
			80.5	-2.46'
10	59	49	109.2	28.7'
			254.6	42.6'
			297.2	71.3' -2.46'
	212	132		
10	53	33		
5		+7		
15	53	40		Mean -2.50'

7376.6623

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1906phae.proj...580W

June 14, 1906

Index L α A

74.1 IX

11 -9 56	116.5	42.4		
	261.3	27.2		B
	288.5	69.6	-2.52	
	80.5		-2.50	
11 12 23	108.4	27.9		
	254.0	42.6		
	296.86	70.5	-2.49	

Index R α B

343.8

11 15 46	27.2	43.4		
	170.2	26.8		A
	197.0	70.2	-2.50	
	353.4			
11 18 35	20.8	27.4	-2.55	
54 160	164.0	39.9		
11 13 70	203.9	67.3	-2.60	
5 +7				
16 14 17			Mean -2.52	

7376.6766

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1906phae.proj..580N

June 14, 1906

Index R & B

			346.4		X
11	32	23	25.0	38.6'	
			170.0	27.4'	A
			197.4	66.0'	-2.64'
			352.2		-2.66'
11	34	52	20.2	28.0'	
			165.6	39.4'	
			205.0	67.4'	2.59'

Index Z & A

			254.2		
11	37	30	295.9	41.7'	
			80.6	28.4'	B
			109.0	70.1'	-2.50'
			261.2		-2.51'
11	39	44	288.6	27.4'	
	142	149	74.2	42.3'	
11	35	67	115.8 6.5	69.7'	-2.52'
5		+7			
16	36	14	S. J. 17 34	Means	-2.58'
			Hb. A -0 22		
7376.6918			Dec + 14.5	He's watch need	
			P. A 112.5 Sec B	Hatch 7 sec. slow	
			Sprocket -2.5 A		
			" -1.5 B		
			" -1.0 b		

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1906phae.proj...580w

June 15, 1906 (Friday)

Fourth Type Star +36° 3243 (7.5) Phot. J. H. Obs. Bowie Sec

18	40	+37.4
13	35	
5	5	
6	55	

Index Lick

B

	143.6	4th type dis
δ 29 40	228.8	85.2'
	336.7	59.1'
	35.8	144.3' -0.69'
	153.9	-0.64'
	217.1	63.2'
	320.5	85.8'
	46.3	149.0' -0.59'

Index R & S

A

	55.5	
	136.0	80.5'
	245.5	60.1'
	305.6	140.6' -0.76'
	65.8	-0.76'
δ 39 17	125.7	59.9'
68 57	233.6	80.6'
δ 34 28	314.02	140.5' -0.76'
5 +9		
13 34 37		Mean -0.70'

7377.5657

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1906phae.proj..580N

June 15, 1906

S.T. 14^h 39^m
H.A. -4 0
Dec. +36.1
P.A. 237.0 Ser B
Sprocket +0.5 B
" +1.5 b

α Ophiuchi Phot J H Obs Bowie Rec.

17	9	+1.4
14	54	
2	15	
9	45	

7" Crap used

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1906phae.proj...580W

June 15, 1906

Index R & A

51.6 ← var. dia I

9 18 50	141.2	89.6 ✓	
	242.3	63.0 ✓	A
	305.3	152.6 ✓	-0.52'
	67.0		-0.52
9 21 40	125.8	58.8 ✓	
	226.3	94.7 ✓	
	321.0	153.5 ✓	-0.51'

Index L & B

320.6

9 27 0	47.7	87.1 ✓	
	156.3	56.7 ✓	B
	213.0	143.8 ✓	-0.70'
	336.2		-0.68'
9 31 10	32.8	56.6 ✓	
	140.4	88.4 ✓	
	229.6 8.8	145.0	-0.67'

97 100

9 24 40

5 +9

14 24 49

Mean -0.60'

7377.6006

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1906phae.proj..580N

June 15, 1906

II

Index 2 & B

320.3

9 38 54 — 48.1 — 87.8' — B

157.8 — 56.2'

214.0 — 144.0' — -0.69'

337.6 — -0.70'

9 42 0 — 33.1 — 55.5'

142.1 — 88.4'

230.5 — 143.9' — -0.70'

Index 2 & A

~~306.0~~

~~50 0~~ — ~~64.3~~

50.9 — A

9 47 55 — 141.0 — 90.1'

244.3 — 60.1'

304.4 — 150.2' — -0.57'

64.9 — -0.57'

9 50 38 — 125.0 — 60.1'

229.7 — 90.3'

320.0 — 150.4' — -0.57'

177 147'

9 44 52'

5 +9'

14 45 1'

Mean -0.64'

7377.6146

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1906phae.proj...500W

June 15, 1906

Index R & A

III

		52.9		
9	54 10	138.0	85.1'	A
		246.0	56.9'	
		302.9	142.0'	-0.73'
		65.0		-0.68'
9	58 28	124.6	59.6'	
		229.4	87.0'	
		316.4	146.6'	-0.64'

Index L & B

		336.4		
10	0 54	34.5	58.1'	B
		144.2	83.4'	
		227.6	141.5'	-0.74'
		323.0		-0.76'
10	3 57	46.8	83.8'	
		157.6	56.3'	
		213.9	140.1'	-0.77'

38	115	149	'
9	58	82	'
5		+9	'
14	59	31	'

Mean -0.72'

7377.6246

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1906phae.proj..580M

June 15 1906

Index 2 & B

IV

			336.0		
10	17	26	33.8	57.8'	B
			144.8	82.2'	
			227.0	140.0'	−0.77'
			325.0		−0.82'
10	20	16	45.1	80.1'	
			158.0	55.7'	
			213.7	135.8'	−0.86'

Index 2 & A

			244.6		
10	23	36	304.0	59.4'	A
			55.8	80.2'	
			136.0	139.6'	−0.78'
			235.4		−0.82'
10	27	48	317.2	81.8'	
			66.7	54.3'	
			121.0	136.1'	−0.85'

	87	126	'
10	21	76	'
5		+9	'
15	22	25	'

Mean −0.82'

7377.6406

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1906phae..proj...56W

June 15, 1906

I
V

Index R & A

245.21

10 32 46	306.3	61.2'		A
	55.8	79.4'		
	135.2	140.6	-0.76'	
	232.5		-0.76'	
10 35 48	316.0	83.5'		
	67.7	56.9'		
	124.6	140.4'	-0.77'	

Index L & B

147.0

10 39 36	223.8	76.8'		B
	331.7	52.3'		
	31.0	129.1'	-1.00'	
	158.9		-0.97'	
10 42 2	213.6	54.7'		
	327.0	77.0'		
	44.0	131.7'	-0.94'	

Mean -0.86'

148 132'
10 37 33'
5 +9'
15 37 42'

7377.6512

1906phae.proj..580M

June 15, 1906

Index L & B

VI

	147.0		
10 52 18	224.5	77.5'	B
	339.4	51.6'	
	31.0	129.1'	-1.00'
	159.0		-0.96'
10 55 30	214.3	55.3'	
	325.9	76.9'	
	42.8	132.2'	-0.93'

Index R & A

	68.4		
10 59 8	126.2	57.8'	A
	233.8	80.9'	
	314.7	138.7'	-0.80'
	55.0		-0.84'
11 2 25	134.2	79.2'	
	247.2	55.6'	
	302.8	134.8'	-0.88'

41	168	84'
10	57	21'
5		+9'
15	57	30'

Mean -0.90'

7377.6650

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1906phae.proj...580W

June 15, 1906

Index R & A

VII

		68.7			
11	12 30	122.9	54.2 ✓		
		236.0	79.4 ✓		
		315.4	133.6 ✓	−0.90.	A
		56.5		−0.90.	
11	15 27	134.6	78.1 ✓		
		247.4	55.0 ✓		
		302.4	133.1 ✓	−0.91.	

Index L & S

		327.9			
11	18 ~~20~~ 30	37.3	69.4 ✓		
		158.3	55.1 ✓		S
		213.4	124.5 ✓	−1.10.	
		339.3		−1.05.	
11	20 24	32.2	52.9 ✓		
	65 111.	146.7	76.1 ✓		
11	16 43.	222.8	129.0 ✓	−1.00.	
5	+9.				
16	16 52	L. J. 17^{h}	17^{m}	Mean −0.98.	
		H. A. +0	5		
7377.6784		Dec. +1.0		It's watch used for times	
		P. A. 213.0 Vega S		~~Watch~~ 9 sec. slow	
		Sprocket −5.5 S		Region identified. Sprocket however, accidentally read wrong as probably light was poor. Usual comp. star used.	
		" −4.5 L			

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1906phae.proj..580N

June 19, 1906 (Tuesday)

α Ophiuchi Phot. 3 ft. Obs. Bowie Rec.

17	9	+1.4
13	49	
3	20	
8	40	

7" cap used

Index 2 & A

	233.0 ←	var. dis
8 19 8	315.2	82.2' A
	66.1	56.2'
	122.3	138.4' -0.81'
	245.3	-0.84'
	303.87	58.4'
	56.0	77.0'
	133.0	135.4' -0.87'

Index L & B

	150.0	
	221.2	71.2' B
	339.4	51.6'
	31.0	122.8' -1.13'
	159.8	-1.15'
8 29 22	211.2	51.4'
48 30'	332.0	69.5'
8 24 15'	41.5 ~~39.2~~	120.9' -1.17'
5 -6		
13 24 9		Mean -1.00'

7381.5584

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1906phae.proj..580W

June 19, 1906

S.J. 14^h 48^m
Ho.A. −2 25
Dec. +1.0
P.A. 213.1 Ser. S
Sprocket −5.5 S
" −7.5 b

Z Herculis. Phot. 3 Ht. Obs Bowie Sec.

17	51	+14.5
15	6	
2	45	
9	15	

Full aperture.

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1906phae.proj..580M

June 19, 1906

Index L & A

75.5 var. dis

113.7	38.2'	
260.6	31.0'	
291.6	69.2'	-2.53'

9 13 48

79.9 -2.55'

108.8	28.9'	
256.0	39.2'	
295.2	68.1'	-2.57'

Index R & B

345.8		
23.4	37.6'	
172.2	26.3'	
198.5	63.9'	-2.72'

351.5 -2.70'

18.1	26.6'	
166.2	38.3'	
204.5	64.9'	-2.68'

Mean -2.62'

9 24 18

37 66

9 18 63

5 -6

14 18 57

S. J. 15 37

H. A. -2 17

Dec. +14.5

7381.5965 P. A. 293.5 M.B

Sprocket -2.5 A

" -1.5 B

" -1.0 b

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1906phae.proj..580W

June 19, 1906

R X Hercules Phot. I Ht. Obs. Bowie Rec.

18	16	+12.0
15	41.	
2	35	
9	25	

9.5 bar used

Index Left

	162.0	var. dis.
9 50 28	210.1	48.1'
	344.6	38.0'
	22.6	86.1' -2.02'
	188.2	-2.06'
	204.0	35.8'
	339.4	47.0'
	26.4	82.8' -2.11'

Index Right

	68.6	
	121.0	52.4'
	252.0	41.9'
	293.9	94.3' -1.80'
	76.7	-1.90'
	111.9	35.2'
	248.9	52.0'
	300.9	87.2' -1.99'

10	1	46
19	51	74'
9	55	67'
5		-6'
14	56	1'

Mean -1.98"

7381.6222

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1906phae.proj..58CM

June 19, 1906

S.T. 16^h 15^m
H.A. −2 12
Dec. +12.0
P.A. 330.9 Ver S
Sprocket −4.5 S
" −3.5 b

R R Draconis Phot. J H. Obs. Bowie Rec.

18	40	+b 2.6
16	20	
2	20	
9	40	

Full aperture

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1906phae.proj..580W

June 19, 1906.

Index L & B

228.0 ← comp. Star dis.

10 30 28	323.0	95.0'
	55.0	79.0'
	134.0	174.0' +0.11'

B

	237.7'	+0.14'
	309.9	72.2'
	45.0	98.4'
	143.4	170.6' +0.18'

Index R & A

	137.3	
	227.3	90.0'
	329.3	73.5'
	42.8	163.5' +0.31'

A

	149.8	+0.30'
10 41 8	215.9	69.1'
71 36'	318.4	96.2'
10 35 48'	53.5 ~~4.6~~	165.3' +0.28'
5 -6'		

15 35 42	S.T.	16h	55m
	R.A.	-1	45
7381.6512	Dec.	+62.1	
	P.A.	275.6 Ver B	
	Sprocket.	-2.5 B	
	"	-1.5 b	

Mean +0.22'

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1906phae.proj..586M

June 19, 1906.

13 0437 N Canum Venaticorum. (See note)

~~Fourth type Star 13° 2359~~ Phot. I Ht. Obs Bowie Rec

13	3	+38.2
17	3	
4	0	

Index 2 & A

	41.0	← 4th ~~type~~ dis
11 25 56	146.0	105.0'
	233.8	87.2'
	321.0	192.2'
		167.8' +0.23'

	50.4	
	138.3	87.9' +0.24'
	224.0	105.0'
	329.0	192.9'
		167.1' +0.24'

Index 2 & B.

	315.0	
	61.0	106.0'
	144.2	84.3'
	228.5	190.3'
		169.7' +0.20'

	325.3	
	45.8	80.5' +0.16'
	133.0	105.2'
	238.92	185.7'
		174.3' +0.11'

11	33	24
	58	80
11	29	40
5		-6
16	29	34

Mean +0.20'

7381.6872

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1906phae.proj..580W

June 19, 1906

S. T. 17h 48m
H. A. +4 40
Dec. +35.0
P. A 191.5 Ver B
Sprocket −0.5 B
" +0.5 b

H's watch used for times tonight
Watch 6 sec. fast

The preceding group is an observation of S Camelopardalis. H. started to observe Fourth Type Star +36° 2304 which is near S Cam. Vam. (Both stars with their comp. stars are marked on the D Me. chart.) As the lights had become somewhat dim and the sky was hazy, S Cam. Vam. was accidentally set on and the region thoroughly identified with photometer off: and the obs. then made. This morning, on examining the D Me. chart, it was found that the object observed was S Cam. Vam. and not the fourth type star.

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1906phae.proj..58CM

June 20, 1906 (Wednesday)

ζ Herculis Phot. 3 H. Obs. Bowie Rec.

17 35 +16.0
13 47
3 48
8 12

Index L & A

68.9 ← var. dis

8 39 44	119.6	50.7'	
	256.0	36.3'	
	292.3	87.0'	-2.00'
	75.8		-1.96'
8 43 2	115.0	39.2'	
	249.1	50.9'	
	300.0	90.1'	-1.91'

Index A & B

	341.4		
8 46 34	28.4	47.0'	
	166.3	35.7'	
	202.0	82.7'	-2.12'
	348.3		-2.03'
8 49 17	24.8	36.5'	
	159.0	52.4'	
	211.4	88.9'	-1.94'

177 97'
8 44 39'
5 -2'
13 44 37'

Mean -2.00'

7382.5726

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1906phae.proj..580W

June 20, 1906

Index R & B

340.4

8 55 48	31.1	50.7'		A
	165.8	35.2'		
	201.0	85.9'	-2.03'	
	348.0		-2.00'	
8 59 24	24.0	36.0'		
	158.6	51.7'		
	210.3	87.7'	-1.98'	

Index L & A

247.3

9 3 3	300.5	53.2'		B
	75.3	39.5'		
	114.8	92.7'	-1.84'	
	254.3		-1.80'	
9 5 40	295.1	40.8'		
	67.2	55.0'		
	122.2	95.8'	-1.76'	

34	122	115
8	60	59
5		-2
14	0	57

Mean -1.90'

7382.5840

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1906phae.proj..580M

June 20, 1906

Index 2 & A

III

248.7

9 11 16

300.8 52.1'

75.5 38.3'

113.8 90.4' -1.90'

255.8 -1.89'

9 14 57

293.2 37.4'

68.4 53.7'

122.1 91.1' -1.88'

Index 2 & B

160.4

9 19 34

212.2 51.8'

348.0 35.2'

23.2 87.0' -2.00'

167.0 -1.98'

9 23 25

203.4 36.4'

340.1 52.1'

32.2 88.5' -1.95'

67 132

9 16 78

5 -2

14 17 16

Mean = 1.94'

7382.5953

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1906phae.proj...580W

June 20, 1906

IV

Index R & B

157.0

9	32	54	210.0	53.0'
			346.7	37.7'
			24.4	90.7' −1.90'

A

166.9 −1.94'

9	35	49	202.0	35.1'
			339.0	52.4'
			31.4	87.5' −1.98'

Index D & A

68.3

9	40	26	121.7	53.4'
			256.5	36.5'
			293.0	89.9' −1.92'

B

77.0 −1.90'

9	44	0	115.3	38.3'
			248.0	52.9'
			300.9	91.2' −1.88'

	151	129	'
9	37	77	'
5		−2	'
14	38	15	'

Mean −1.92'

7382.6098

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1906phae.proj..580M

June 20, 1906

Index Lx A

V

68.4

9	51	48	121.3	52.9'
			256.0	37.9'
			293.9	90.8' -1.89'

77.1 -1.90'

9	54	47	114.1	37.0'
			247.3	53.6'
			300.9	90.6' -1.90'

Index R ~~x~~ B

339.5

9	58	31	29.3	49.8'
			165.3	36.7'
			202.0	86.5' -2.01'

347.0 -2.00'

10	2	35	22.7	35.7'
			157.5	51.5'
			209.0	87.2' -1.99'

37	165	161
9	56	55
5		-2
14	56	53

Mean -1.95'

7382.6228

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1906phae.proj...580M

June 20, 1906

Index R & S VI

339.0

10 12 11 29.9 50.9' A
167.4 34.2'
201.6 85.1' -2.05'

347.7 -2.02'

10 15 35 24.1 36.4'
158.8 50.7'
209.5 87.1' -1.99'

Index L & A

247.4

10 19 35 299.8 52.4' B
76.9 36.1'
113.0 88.5' -1.95'

256.1 -1.96'

10 22 58 293.2 37.1'
70.0 50.3'
120.3 87.4' -1.98'

68 139'

10 17 35'

5 -2'

15 17 33'

Mean -1.99'

7382.6372

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1906phae.proj..580N

June 20, 1906

Index L & A

			248.5		VII
10	33	35	300.5	52.0'	
			76.2	36.6'	B
			112.8	88.6' -1.95'	
			257.0		-2.02'
10	37	30	292.0	35.0'	
			69.5	48.8'	
			118.3	83.8' -2.08'	

Index R & B

			161.3		
10	42	40	209.8	48.5'	A
			349.2	33.3'	
			22.5	81.8' -2.14'	
			168.6		-2.15'
10	45	25	201.9	33.3'	
			341.0	48.0'	
			29.0	81.3' -2.16'	
	157	130'			
10	39	48'			
5		-2'			
15	39	46'		Mean -2.08'	

7382.6526

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1906phae.proj...580W

June 20, 1906

Index R & B

		163.7		VIII
10	53	53	208.7	45.0'
			349.0	32.0'
			251.0	77.0' -2.28'
			168.2	-2.23'
10	57	50	201.6	33.4'
			342.2	47.1'
			29.3	80.5' -2.18'

Index L & A

			71.0	
11	2	20	119.6	48.6'
			256.6	33.0'
			291.6	81.6' -2.15'
			77.6	-2.14'
11	6	42	112.3	34.7'
			250.7	47.6'
			298.3	82.3' -2.13'

42	118	165'
10	59	71'
5		-2'
16	0	9'

Mean -2.18'

7382.6668

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1906phae.proj..580M

June 20, 1906

Index L & A IX

72.5

11	14	26	117.0 6.8	44.3'		B
			257.6	36.0'		
			293.6	80.3'	-2.19'	
			79.0		-2.22'	
11	16	50	111.3	32.3'		
			252.0	45.9'		
			297.9	78.2'	-2.25'	

Index R & B

343.2

11	20	54	27.2	44.0		A
			169.3	30.3		
			199.6	74.3'	-2.37'	
			349.9		-2.35'	
11	23	30	21.9	32.0'		
	73	160	162.9	43.6'		
11	18	55	206.5	75.6'	-2.33'	
5		-2				
16	18	53	S.T. 17h	37m	Mean -2.28	
			H.A -0	15		
7382.6798			Dec. +14.5		His watch used for times	
			P.A. 293.0 Ser B		Hatch 2 sec. fast	
			Sprocket -2.5 A			
			" -1.5 B			
			" -1.0 L			

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1906phae.proj...580W

June 21, 1906 (Thursday)

ζ Ophiuchi Phot. 7 in. Obs. Bowie Rec.

17	9
14	9
3	0
9	0

+1.4

7" cap used

Index L & B

	149.8 ← var. dis	
8 21 2	221.4	71.6'
	339.4	53.1'
	32.5	124.7' -1.09'
	158.6	-1.09'
	210.0	51.4'
	328.8	73.2'
	42.0	124.6' -1.09'

Index R & A

	56.2	
	137.1	80.9'
	246.0	57.0'
	303.0	137.9' -0.82'
	66.8	-0.86'
8 28 46	123.0	56.2'
	234.4	78.3'
49 48	31~~5~~2.7	134.5' -0.89'
8 24 54		
5 -6		
13 24 48		

Mean -0.98'

7383.5587

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1906phae.proj..580N

June 21, 1906

S.T. 14^h 51^m
H.A. −2 20
Dec. +1.0
P.A. 34.6 Ver S
Sprocket −8.5 S
" −7.5 b

R R Draconis Phot I H. Obs Bowie Rec

18	40	+62.6
14	55	
3	45	
8	15	

Full aperture

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1906phae.proj...586W

June 21, 1906

Index Left

	226.4 ←	bomp. Star dis.
8 52 6	324.4	98.0'
	56.0	75.3'
	131.3	173.3' +0.13'

B

	236.8	+0.12'
	313.9	77.1'
	45.1	77.5'
	142.6	174.6' +0.10'

Index Right

	137.9	
	230.4	92.5'
	331.0	68.1'
	39.1	160.6' +0.37'

A

	150.0	+0.36'
	219.8	69.8'
	319.6	91.4'
	51.0	161.2' +0.36'

Mean +0.24'

Rec

9	0	10	
17	52	16	'
8	56	8	'
5		-6	'
13	56	2	'

7383.5806

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1906phae.proj..580N

June 21, 1906

Index Right

319.0		
50.9	91.9'	A
147.8	71.5'	
219.3	163.4'	+0.32'
327.2		+0.24'
41.8	74.6'	
136.8	96.4'	
233.2	171.0'	+0.17'

Index Left

226.7		
324.8	98.1'	B
58.0	74.0'	
132.0	172.1'	+0.15'
237.0		+0.12'
311.34	74.4'	
42.6	101.5'	
144.1	175.9'	+0.08'

Mean +0.18'

9 23 54

9 31 8

54 62

9 27 31

5 −6

14 27 25

S.T. 15h 52m

L.A. −2 45

7383.6024 Dec. +62.8

P.A. 96.0 Ver B

Sparchet −2.5 B

" −1.56

It's ~~watch used~~

~~Watch 6 sec. fast~~

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1906phae.proj...580W

June 22, 1906 (Friday)

Z Herculis Phot. 3 U. Obs. Lowe Ref.

17 35 +16.0
14 00
3 35
8 25

Full aperture used

Index Lad I

252.6 var. dis
297.9 45.3' S
80.3
110.1 29.8'
75.1' -2.3K'

δ 40 56

259.7 31.9' -2.2S'
291.6
72.0 46.5'
118.5 78.4' -2.2K'

δ 43 46

Index R&S

163.5 A
204.7 41.2'
351.1 28.7'
19.8 69.9' -2.5'

δ 47 20

171.0 -2.5'2
198.3 27.3'
344.3 42.4'
26.7 69.7' -2.5'2

Mean -2.40'

δ 50 20'

180 142'
δ 45 36'
5 -4'
13 45 32

7384.5733

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1906phae.proj..580M

June 22, 1906

II

Index Q & B

	163.7	41.8		
8 55 46	205.5			A
	351.7	27.7		
	19.4	69.5	-2.52	
	170.6	27.8	-2.46	
8 59 28	198.4			
	342.9	45.1		
	28.0	72.9	-2.41	

Index L & A

	71.5	45.3		
9 3 14	116.8			
	259.8	29.9		B
	289.7	75.2	-2.34	
	80.0	30.6	-2.31	
9 6 11	110.6			
	250.8	46.7		
	297.5	77.3	-2.24	

Mean -2.38

34	123	99
8	60	70
5		-4
14	1	6

7384.5841

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1906phae.proj...580M

June 22, 1906

Index L & A

	71.6	45.0	
9 12 0	116.6		
	258.9	30.2	
	289.7	75.2	−2.32
	79.7	30.6	−2.29
9 14 28	110.3		
	250.8	47.2	
	298.0	77.4	−2.26

Index R & B

	343.8	42.1	
9 18 28	25.9		
	170.3	27.4	
	197.7	69.5	−2.52
	350.9	30.3	−2.42
9 21 24	21.2		
	163.0	42.0	
	205.0	72.3	−2.43

Mean −2.34

	6 5 80	
9	1 6 35	
5	−4	
14	16 31	

7384.5948

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1906phae.proj..580N

June 22, 1906

Index R + S

IV

344.1

9 30 48 — 273 — 43.2' — A
170.4 — 28.5'
198.9 — 71.7' — -2.45'

349.7 — -2.46'

9 35 2 — blonde — 19.9 — 30.2'
164.8 — 40.6'
205.4 — 70.8' — -2.48'

Index Lack

253.3

9 39 29 — 296.9 — 43.6' — B
79.8 — 29.8'
109.6 — 73.4' — -2.40'

259.4 — -2.36'

9 42 16 — 291.8 — 32.4'
71.7 — 43.3'
115.0 — 75.7' — -2.32'

146 95

9 36 54

5 -4

14 36 50

Mean -2.41

7384.6087

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1906phae.proj...580

June 22, 1906

Index L & A

	252.7	44.0		V
9 52 46	296.7			
	80.4	29.0		B
	109.4	73.0	-2.41	
	259.7	29.5	-2.36	
9 55 55	289.2			
	70.6	46.5		
	117.1	76.0	-2.32	

Index R & B

	163.1	42.4		
10 0 14	205.5			
	351.6	26.A		A
	18.4	69.2	-2.53	
	170.4	24.6	-2.44	
10 3 35	199.0			
	342.5	43.4		
	26.3	72.4	-2.43	

Mean -2.42

38 110 150
9 57 68
5 -4
14 58 4

7384.6237

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1906phae.proj..580M

June 22, 1906

VI

Index R + B

	164.6		
10 10 20	205.9	41.3'	A
	351.0	27.7'	
	18.7	69.0'	-2.54'
	171.3		-2.54'
10 13 56	198.8	27.5'	
	343.7	41.5'	
	25.2	69.0'	-2.54'

Index L + A

	71.9		
10 18 48	117.2	45.3'	B
	260.5	29.0'	
	289.5	74.3'	-2.37'
	80.7		-2.36'
10 23 38	109.7	29.0'	
64 162	252.3	45.7'	
10 16 40	298.0	74.7'	-2.36'
5 -4			
15 16 36		Mean	-2.45'

7384.6365

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1906phae.proj...580N

June 22 1906

Index L + A VII

		71.9		
10	35	42	117.7	K5.8'
			260.0	29.0'
			289.0	7K8' -2.3r'
			80.6	2A.8' -2.36'
10	38	5	109.4	
			253.0	K5.2'
			298.2	7K.0' -23L'

Index Q & B

			344.4	K1.1'
10	42	8	25.5	A
			171.0	27.1'
			198.1	6L2' -2.57'
			350.5	2L.3' -2.56'
10	45	48	18.8	
			165.2	K0.2'
			20~~4~~95.4	6A.5' -2.56'

	160103	
10	40 26	
5	-4	
15	40 22	

Mean -2.K6'

7384.6531

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1906phae.proj..580M

June 22, 1906

Index Q & S

VIII

343.4
24.7
171.2
197.8

41.3'
26.6'
67.9' -2.58'

A

10 53 38

351.4
18.8
164.5
205.43

-2.58'

27.4'
40.8'
68.2' -2.57'

10 57 20

Index L & A

252.9
290.6
80.6
109.2

37.7'
28.6'
66.3' -2.63'

B

11 2 28

260.5
288.6
73.7
116.30

-2.56'

28.1'
42.3'
70.4' -2.49'

11 5 45

42 117 131'
10 59 48'
5 -4'
15 59 44

Mean -2.57'

7384.6665

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1906phae.proj...580M

June 22 1906

Index L & A IX

			252.8		
11	18	10	296.3	43.5'	B
			80.8	29.1'	
			109.9	72.6'	-2.42'
			260.0		-2.46'
11	20	48	288.9	28.9'	
			73.8	43.7'	
			11~~8.2~~7.5	72.6'	-2.46'

Index R+B

			165.85		
11	24	48	204.1	38.6'	A
			354.5	26.4'	
			17.9	65.0'	-2.68'
			171.6		-2.70'
11	28	0	197.9	26.3'	
			346.0	37.2'	
			23.2	63.5'	-2.73'

	90	106
11	22	56
5		-4
16	22	52

Mean -2.58'

S.J. 17 52
H.A. -0 3

7384.6825 Dec. +14.5

P.A. 293.2 Ver B

Sprocket -2.5 A
" -1.5 B
" -1.0 b

It's watch used for times
Watch 4 sec. fast

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1906phae.proj.580

June 26, 1906 (Tuesday)

Fourth Type Star 36° 32 4 3 Phot. J St. Obs Sonnie Rec

18	40	+37.4
14	30	
4	10	
7	50	

Full aperture used

Index Le A

322.3	← 4th type dis.	
45.5	83.2'	
151.6	64.1'	
215.7	147.3'	−0.63'

8 35 14

335.6		−0.62'
38.7	63.1'	
141.3	85.7'	
227.0	148.8'	−0.60'

Index R & B

233.6		
316.8	83.2'	
64.8	61.3'	
126.1	144.5'	−0.68'

245.0		−0.66'
306.0	61.0'	
51.6	85.9'	
137.5	146.9'	−0.64'

Mean −0.64'

8	43	32
	78	46
8	39	23
5		+4
13	39	27

7388.5690

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1906phae.proj...580N

June 26, 1906

S.T. 15h 25m
H.A. −3 15
Dec. +36.1
P.A. 236.5 Ver. ⊙
Sprocket +0.5 ⊙
" +1.5 b

H's watch used for times tonight
~~Hatch~~ 4 sec slow

α Ophiuchi Phot. J. H. Obs. Browie Rec

7" Crap

17	9
15	45
1	24
10	36

Clouds ~~too thick~~ for var.
" now thick everywhere no chance for anything further

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1906phae.proj..580N

June 27, 1906 (Wednesday)

α Ophiuchi Phot & H. Obs Bowie Rec.

17	9	+1.4	7" b cap used
14	19		
2	50		
9	10		

Index 2 & A

	233.5 ←	var. dis	A
8 15 20	317.1	83.6'	
	68.4	52.4'	
	120.8	136.0'	-0.86'
	247.8		-0.86'
	303.0	55.2'	
	54.0	81.2'	
	135.2	136.4'	-0.85'

Index 1 & B

	150.1		
	221.5	71.4'	B
	340.9	45.6'	
	26.5	117.0'	-1.26'
	161.5		-1.21
8 25 39	210.5	49.0'	
	327.8	72.7'	
40 59	40.5 ~~39.8~~	121.7'	-1.16'
8 20 30			
5 +3			
13 20 33			Mean -1.04'

7389.5560

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1906phae.proj...58

June 27, 1906

S. J. 15 13
H. A -2 0
Dec +0.9
P. A 213.0 Ser B
Sprocket -8.5 B
" -7.5 b

ν Serpentis Phot. 3 Ht. Obs. Bowie Sec.

15	12	-15.9
15	32	
2	40	
9	20	

Measurements on fol. page

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1906phae.proj..580N

June 27, 1906

Index Left

I

331.4 ← Comp. Star dis.

9	23	8	41.8	70.4'
			156.3	55.9'
			212.2	126.3' +1.06'

8

338.0 +1.06'

9	26	56	31.2	53.2'
			148.8	73.0'
			221.8	126.2' +1.06'

Index Right

236.0

9	31	46	313.5	77.5'
			67.6	55.4'
			123.0	132.9' +0.92'

A

245.5 +0.92'

9	35	20	303.8	58.3'
			56.5	74.7'
			131.2	133.0' +0.92'

	115	130	'
9	28	78	'
5		+3	'
14	29	21	'

Mean +0.99'

8
5
13
73

7389.6038

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1906phae.proj..580W

For continuation of observations on ~~the~~
June 27, see R 157.

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1906phae.proj..580W

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1906phae.proj..580M

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1906phae.proj..580W

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1906phae.proj..580w

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1996phae.proj...580W

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