KG
11365
583

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1907phae.proj..584M

Feb. 26, 1907 (Tuesday)

Fourth Type Star -4° 1708. Phot J. H. Bo. Bowie rec.

6	56	-4.0
5	56	
1	00	Color 4.
11	00	Index Lat

151.8 ← 4th type dis.

7 33 15

214.5	62.7^	
337.9	45.5^	
23.4	108.2^	-1.46^ B

158.6		-1.40^
206.9	48.3^	
329.0	64.6^	
33.6	112.9^	-1.35^

Index R & B

57.4		
124.3	66.9^	
245.8	51.1^	
296.9	118.0^	-1.24^ A

67.2		-1.23^
117.2	50.0^	
236.4	68.6^	
305.0	118.6^	-1.22^

Mean -1.32^

7 44 10

77 25 ^

7 38 42 ^

5 -13 ^

12 38 29 ^

7633.5268

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1907phae.proj..584W

Feb. 26, 1907

S. T. 6^h 45^m
H. A. −0 5
Dec. −4 0
C. A. 1/6.0 Ser 8
Sprocket −3.5 A
" −2.5 8
" −2.0 6

Double Star ~~Nr~~ 109 (Comstock's List) = 62 Draco Maj.
11 34 +32.5 Phot. R. W. ds. Bowie rec.
6 59
4 35
7 25
P. A. ~~Dist~~. 300°, Dist. 1.5″. Mags 6.0 & 10.2

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1907phad.proj..564w

Feb. 26 1907

Index L & A B.

350,7 } Fol. a. brighter dis.
11.3 }

8 27 20

Delayed ~~Stopped~~ by clouds.
Still cloudy everywhere.
Some Clearer.

8 40 0

B

	20.6^	
171.4	15.4^	
186.8	36.0^	4.00^

351.8		3.96^
9.5	17.7^	
170.0	19.4^	
189.4	37.1^	3.93^

Index R & B A.

259.0		
279.5	20.5^	
81.7	17.3^	
99.0	37.8^	3.89^

A

262.0		3.94^
278.7	16.7^	
80.6	19.4^	
100.0	36.1^	4.00^

Mean. 3.95^

8	54	57	
	81	77	^
8	40	68	^
5		−13	^
13	40	55	^

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1907phae.proj..584w

Feb. 26, 1907

9 00 Sky all cloudy everywhere no chance for anything further.

It's watch used for times.
~~Watch~~ 1.3 sec. fast.

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1907phaa.proj : .584W

Feb. 27, 1906 (Wednesday)

Fourth Type Star −17°2442 Phot 3 Hr Obs & one Rec

8 15 −17.1

5 55

2 20

9 40

Index R & A

66.9 ← Comp Star dis

7 44 45

115.4 48.5^

236.9 68.9^

300.8 112.4^ +1.36^

56.2 +1.30^

124.4 68.2^

246.5 49.5^

296.0 117.7^ +1.24^

Index L & B

338.5

28.2 49.7^

151.5 59.5^

211.0 109.2^ +1.44^

329.6 +1.43^

7 56 46

32.8 63.2^

157.5 46.8^

204.3 110.0^ +1.42^

100 91 ^

7 50 46 ^

5 −14 ^

12 50 32 ^

7634.5250

Color estimated at 2 but region Mean +1.36^

is rather low and moon very bright being nearly at full, so that color estimate cannot be made quite as critically

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1907phae.proj..584W

Feb. 27, 1907.

as under more favorable circumstances

S. J. 6^h 49^m
H. A. −1 28
Dec. −18.5
P. A. 211.5 Ser B
Sprocket −1.5 A
" −0.5 B
" 0.0 b

Double Star No. 13 (Comstock's List) μ Cassiop.

0 59 +54.2 Phot. R. A. Obs. Bonn. Rec.

7 9

6 10

P. A. 210° Dist 3.2 ± Mags. 5.3 + 11.1

1907phad.proj..584W

Feb 27, 1907

Index Led B.

357.0 ← South a brighter dia.

δ 51 0

5.1	8.1 ^	
	6.6 ^	
177.7	14.7 ^	5.96 ^
184.3		

5.96 ^

357.4	6.6 ^	
4.0	8.1 ^	
177.5	14.7 ^	5.96 ^
185.6		

Index Red A.

267.6		
275.5	7.9 ^	
87.4	6.6 ^	
94.0	14.5 ^	5.99 ^

5.90 ^

267.5		
273.8	6.3 ^	
85.8	9.4 ^	
95.2	15.7 ^	5.52 ^

δ 59 54

110 54 .

8 55 27 ^

5 -14 .

13 55 13 .

Mean 5.93 ^

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1907phae.proj..584W

Feb. 27, 1907

Double Star No. 16 (Comstock's List) ~~I~~ Cassiop.
Phot. R. A. Oke Bowie Rec
R.A. 135 Dist. 2.5 Image 4.4 & 10.9

Index Left B.

	179.0	North & brighter dis.	
9 34 14	182.3	3.3"	
	356.7	7.2"	
	3.9	10.5"	6.69"
	177.5		6.67"
	183.4	5.9"	
	358.0	4.8"	
	2.8	10.7"	6.65"

Index Right A.

	88.4		
	93.2	4.8"	
	268.1	5.9"	
	274.0	10.7"	6.65"
	87.1		6.67"
9 41 45	94.1	7.0"	
75 59 "	268.7	3.5"	
9 37 60 "	272.2	10.5"	6.69"
5 -14 "			
14 37 46 "			

Means 6.67"

It's watch used for times in previous observations
Watch 14 sec. fast

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1907phad.proj..584W

Feb. 27, 1907

B. & b. 1182			B. 394		
~~10~~	~~17~~	~~51.0~~	~~10~~	~~15~~	~~0.0~~
			~~10~~	~~19~~	~~0.0~~
10	19	50.0	10	20	0.0
10	20	49.9	10	21	0.0

Resp. Imp. I Phot. R. H. Obs. Bowie Rec.
Comp. with Sat. on prec. side = Sat. III

10	43	16^	10	43	4			Imp.
	43	22^	10	43	10			~~Seen.~~
	43	34^		"	22	+2.4^	36.6^	169.5
	43	56^		"	44	+1.7^	50.1^	206.1
	44	9^		"	57	+1.5^	53.8^	156.0
	44	18^		44	6	+1.3^	58.0^	209.8
	44	32^		"	20	+1.1^	63.2^	151.8
	44	42^		"	30	+0.9^	67.0^	215.0
				"	~~41~~			~~15~~
	45	5^		"	53	+0.8^	69.1^	148.0
	45	19^		45	7	+0.7^	71.0^	217.1
	45	37^		"	25	+0.7^	72.4^	146.1
	45	50^		"	38	+0.5^	76.7^	218.5
	46	3^		"	51	+0.4^	79.7^	141.8
	46	18^		46	5			22 ~~2~~ 1.5 ~~1.0~~

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1907phae.proj..584W

Feb. 27, 1907

		10	46	23	77.9^	143.0
10	46	44^	"	38	80.8^	220.9
		+13^			158.7^	
10	46	57^	"	54	+0.4^ 79.4^	140.7
			47	3		221.5
			"	17	83.5^	137.5
10	47	53^	"	49	76.1^	221.0
		+13^			159.6^	
10	48	6^	48	6	+0.4^ 79.8^	145.5
			"	19		221.6
			"	45	79.3^	142.0
10	49	10^	"	56	79.5^	221.3
		+13^			158.8^	
10	49	23^	49	24	+0.4^ 79.4^	140.5
			"	35		220.0
			"	55	79.7^	141.5
10	50	22^	50	11	77.5^	221.2
		+13^			157.2^	
10	50	35^	"	26	+0.4^ 78.6^	142.5
			"	57		220.0
			51	13	80.0^	140.0
10	51	37^	"	27	79.5^	220.0
		+13^			159.5^	
10	51	50^	"	49	+0.4^ 79.8^	141.5
			"	59		221.0
			52	14	79.5^	141.5
10	52	46^	"	36	80.7^	221.0
		+13^			160.2^	
10	52	59^	53	0	+0.4^ 80.1^	140.5
			"	14		221.2
			"	36	78.9^	141.3
10	54	1^	"	45	80.5^	220.2
		+13^			159.4^	
10	54	14^			+0.4^ 79.7^	

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1907phaa.proj..584W

Feb. 27, 1907

	10	54	10	141.5	7
		"	34	222.0	
		55	41	82.0^ 140.0	
10	56 7^	56	0	79.8^ 222.0	8
	+13^			161.8^	
10	56 20^	"	18	+0.3^ 80.9^ 142.5	
	-	"	30	222.3	
		"	42	80.0^ 142.5	
10	57 3^	"	52	80.9^ 222.5	
	+14^			160.9^	9
10	57 17^	57	9	+0.4^ 80.4^ 141.6	
		"	30	222.5	

Limits of Vis.

		~~34~~		+	
	10	58	46	37.5^ 164.0	
10	59 14^	59	1	35.1^ 201.5	
	+14^			72.6^	
10	59 28^	"	15	+2.4^ 36.3^ 163.9	
		"	54	199.0	

B. & b. 1182

11	3	45.8
11	4	46.0
11	5	45.8

B. 394

11	4	0.0
11	5	0.0
11	6	0.0

Seeing somewhat blurry. Eclipse com-

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1907phae.proj..584W

Feb. 27, 1907

sidered good but the somewhat blurry seeing caused the settings to be made ~~very~~ rather slowly so that not as many settings could be obtained during the time of variation in light as would otherwise have been the case.

∴ In prec. eclipse.

From.	10^h	$2\frac{m}{}$	$1.^s$	to	10^h	$3\frac{m}{}$	$30.^s$ add 11 secs,
	10	$3\frac{m}{}$	30.	"	10	$4\frac{m}{}$	$2.^s$ " 12, "
	10	$4\frac{m}{}$	$2.^s$	"	10	$6\frac{m}{}$	26. " 13, "
	10	$6\frac{m}{}$	26.	"	11	3	$6.^s$ " 14, "

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1907phao.proj..584W

March 1, 1907 (Friday)

Double Star No 68 (Comstocks List) Procyon A B

7	32	+5.5
6	27	
1	5	
10	55	

None of the companions of Procyon seen. Haze and clouds too thick.

7 45 0 Clouds steadily thickening; only two or ~~three~~ stars visible

8 0 0 Clouds steadily thickening, ~~storm~~ coming only Jupiter visible. No chance for ~~anything further~~

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1907phae.proj..584W

March 5, 1907 (Tuesday)

Double Star No. 84 (Comstock's List) = 10 Ursae Majoris A B

8	51	+42 3	Phot R	Ht Obs	Source Rec
6	41	P. A 200	Dist 2.2±	Mags. 5.0 & 10.0	
2	1.0				
9	50				

Index Left B.

86.0	Bottom a brighter dis.	
94.4	8.4^	
267.6	5.5^	
273.1	13.9^	6.08^

7 42 10

87.8		6.27^
92.6	4.8^	
266.6	6.9^	
273.5	11.7^	6.46^

Index Right A.

357.3		
3.8	6.5^	
178.1	4.8^	
182.9	11.3^	6.53^

357.2		6.36^
3.1	5.9^	
176.5	7.3^	
183.8	13.2^	6.20^

7 51 35

	93 45	^
7	46 52	^
5	-13	^
12	46 39	^.

Mean 6.32^

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1907phae.proj..584W

March 5, 1907

Star B of Comstocks List No. 84 = (10 Ursae Maj) comp with Star C of Comstock's List No. 85.

Index L & S B. Plot. R A. Obs. Corr Rc

~~3593~~

~~1401~~

~~8 1 48~~ ~~2247~~

~~43.6~~

139.1 Star B dis

8 5 30 218.7 79.6^

330.7 60.0^

30.7 139.6^ 0.78^

152.0 0.76^

210.6 58.6^

317.2 83.4^

40.6 142.0^ 0.73^

Index R & A A.

46.3

137.3 91.0^

239.7 59.3^

299.0 150.3^ 0.57^

66.0 0.66^

8 15 21 118.5 52.5^

20 50 ^ 225.3 88.4^

8 10 25 ^ 313.7 141.2^ 0.75^

5 -13 ^

13 10 12 ^

Mean 0.71^

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1907phae.proj..584W

March 5, 1907

In both the prec. groups observations quite difficult on account of clouds and haze as well as faintness of companions

9

Double Star No. 104 (Comstock's List) Σ 1516 A B

11	6	+74.3
7	46	
3	20	
8	40	

9

Sky all cloudy in this region. No stars visible

9
5
14

Abandoned

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1907phae..proj..584W

March 5, 1907

Double Star ~~No~~ 87 (Comstock's List) 81 Π Bancri
9 7 +15.5 Phot. R No Obs Bonn Rev
8 27 P.A 230° Dist 4.'0 ± Mags. 6.0 9.5
40
11 20

Index R & S

	168.3	South fol. & brighter dis	
9 36 20	193.2	24.9"	
	352.3	18.3"	
		43.2"	3.60"
	10.6		
	171.0		3.58"
	189.3	18.3"	
	348.4	25.5"	
		43.8"	3.57"
	13.9		

Index E & A

	77.5		
	101.3	23.8"	
	262.4	17.6"	
		41.4"	3.69"
	280.0		
	82.1		3.64"
9 44 0	100.0	17.9"	
80 20 "	258.0	25.5"	
9 40 10 "		43.4"	3.59"
5 -13 "	283.5		
14 39 57 "		Mean	3.61"

It a watch need for times tonight
~~Watch~~ 13 sec. fast

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1907phae.proj..584W

March 6, 1907 (Wednesday)

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

3 58 +27.2 3dd aperture used
6 33
+2 35

Index Rat

329.2 var. dis

7 38 20	33.9	64.7'	A 8
	158.0	47.0'	
	205.0	111.7'	-1.38'
	338.5		-1.40'
7 41 44	22.4	43.9'	8
	148.6	65.6'	
	214.2	109.5'	-1.43'

Index L&S

237.0

7 46 4	304.9	67.9'	B 8
	69.0	45.4'	
	114.4	113.3'	-1.34'
	246.9		-1.32'
7 49 30	296.4	49.5'	8
174 98 '	60.4	65.3'	
7 43 54 '	125.7	114.8'	-1.31'
5 -9 '			4 5
12 43 45 '			13

Sprocket etc. not read as observer wished to observe R J Persei immediately. Region strongly identified

Mean -1.36'

7641.5305

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1907phae.proj. .584W

March 6, 1907

R 3 Persei Shot. I H. Obs. Bowie Rec

3 2 +45.7 Full aperture

7 17

4 15

I

Index Above

234.4 Comp. Star dia A

δ 18 10 312.0 77.6^

63.5 53.8^

117.3 131.4^ +0.95^

245.2 +0.98^

δ 21 30 298.8 53.6^

54.0 74.5^

Passing clouds 128.5 128.1^ +1.02^

Index Below

147.9

δ 25 10 217.4 69.5^

335.7 51.7^ B

27.4 121.2^ +1.17^

155.6 +1.18^

δ 27 43 207.0 51.4^

325.9 68.1^

34.0 119.5^ +1.20^

91 93^

δ 22 68^

5 -9^

13 22 59^

Mean +1.05^

7641.5576

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1907phae.proj..584W

March 6 1907

Index Below

B

II

146.3

δ 31 0

217.0 70.7'

335.4 51.6'

27.0 122.3' +1.14'

155.4 +1.18'

δ 33 48

207.8δ 52.4'

325.0 66.2'

34.2 118.6' +1.22'

Index Above

56.0

δ 36 44

126.0 70.0' A

246.0 50.7'

296.7 120.7' +1.18'

62.8δ +1.08'

δ 39 20

119.7 56.9'

236.0 72.6'

308.6 129.5' +0.99'

Mean +1.13'

139 112'

δ 34 73'

5 -9'

13 35 4'

7641.5661

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1907phae.proj..584W

March 6, 1907

III

Index Above

57.4

δ 45 30 — 125.6 — 68.2″ — A
246.2 — 53.8″
300.0 — 122.0″ +1.15″

64.1 +1.12″

δ 48 30 — 118.0 — 53.9″
235.3 — 70.8″
306.1 — 124.7″ +1.09″

Index Below

328.3

δ 52 34 — 33.5 — 65.2″ — B
155.3 — 51.7″
206.4 — 116.3″ +1.27″

337.5 +1.32″

δ 56 12 — 256.2 — 48.7″
149.0 — 63.4″
212.4 — 112.1″ +1.37″

201 106″
δ 50 42″
5 −9″
13 50 33″

Mean +1.22″

7641.5768

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1907phae.proj..584M

March 6, 1907

Index Below IV

9	3	0	331.3	
			32.2	60.9^
			157.5	46.1^
			203.6	107.0^ +1.49^
			337.3	+1.45^
9	5	45	24.8	47.5^
			148.5	63.0^
			211.5	110.5^ +1.41^

Index Above

9	9	55	241.0	
			305.8	64.8^ A
			66.0	48.4^
			114.4	113.2^ +1.34^
			245.4	+1.38^
9	12	38	294.9	46.5^
			59.4	63.6^
			123.30	110.1^ +1.42^
	29	138^		
9	7	50^		
5		-9^		
14	7	41^		

Mean +1.42^

7641.5887

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1907phae.proj .584W

March 6, 1907

Index Above V

243.1

9 20 25 — 3022 — 59.1^ — A
67.3 — 45.3^
112.6 — 104.4^ +1.55^

250.0 +1.58^

9 23 17 — 293.2 — 43.2^
60.4 — 58.8^
119.2 — 102.0^ +1.61^

Index Below

156.5

9 28 30 — 207.80 — 50.2^
339.5 — 42.4^
21.9 — 92.6^ +1.84^ — B

160.5 +1.80^

9 31 58 — 202.8 — 42.3^
335.0 — 53.0^
28.0 — 95.3^ +1.77^

102 130^
9 25 62^
5 -9^
14 25 53^

Mean +1.69^

7641.6013

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1907phae.proj..584W

March 6, 1907

VI

Index Below

		154.7		B
9	38	26	206.5	51.8^
			343.6	36.2^
			19.8	88.0^ +1.97^
			163.4	+1.99^
9	42	32	199.4	36.0^
			335.8	50.5^
			26.3	86.5^ +2.01^

Index Above

			6.6.7	
9	46	48	116.3	49.6^ A
			253.6	36.1^
			289.7	85.7^ +2.03^
			73.8	+2.10^
9	50	4	107.3	33.5^
			247.5	47.5^
			295.50	81.0^ +2.17^

	176	110	^
9	44	28	^
5		-9	^
14	44	19	^

Mean +2.04^

7641.6141

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1907phae.proj..584

March 6. 1907

Index Above

VII

67.7

9 55 12	114.0	46.3^	A
	257.5	31.0^	
	288.5	77.3^	+2.28^

74.1 +2.36^

9 59 40	107.2	33.1^	
	254.5	39.3^	
	293.8	72.4^	+2.43^

Index Below

341.7

10 5 20	22.0	40.3^	B
	163.9	31.9^	
	195.8	72.2^	+2.43^

345.5 +2.48^

10 9 26	16.6	31.1^	
	162.7	37.8^	
	200.5	68.9^	+2.54^

Means +2.42^

38	128	98	^
9	62	24	^
5		-9	^
15	2	15	^

Stopped by upper small shutter sticking.

7641.6265 Region thoroughly identified. Sprocket etc. could not be read.

H's watch used for times tonight.
H watch 9 sec. fast.

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1907phae.proj..584W

March 7, 1907 (Thursday)

α Cephei		Phot. I	H. Obs. Bowie Rec.		
0	30	+81.7	Full aperture used		
5	50				I
5	20				
		Index Above			
		49.9 ←	comp. Star dis		
7	11	10	123.0	83.1^	
			241.0	62.6^	
			303.6	145.7^	+0.66^
			59.8		+0.59^
7	13	20	123.5	63.7^	
			226.9	89.1^	
			316.0	152.8^	+0.52^
		Index Below			
			322.6		
7	16	48	38.4	75.8^	
			151.9	61.2^	
			213.1	137.0^	+0.83^
			332.4		+0.78^
7	18	52	32.8	60.4^	
	58	130^	140.1	82.0^	
7	14	62^	222.1	142.4^	+0.73^
5		-5^			
12	14	57^			
				Mean	+0.68^

7642.5104

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1907phae.proj..584W

March 7, 1907

Index Below II

	320.5			
7 22 46	43.7	83.2		B
	149.4	63.6		
	213.0	146.8	+0.64	
	330.5		+0.60	
7 25 10	33.0	62.5		
	136.3	88.3		
	225.2 4.6	150.8	+0.56	

Index Above

	224.4			
7 28 50	318.2	93.8		A
	56.3	69.7		
	126.0	163.5	+0.31	
	234.5		+0.28	
7 31 36	305.9	71.4		
	44.5	94.9		
	140.0 39.4	166.3	+0.26	

	106	142	
7	26	66	
5		-5	
12	27	1	

Mean +0.44

7642.5188

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1907phae.proj..584W

March 7, 1907

	Index Above			III
	222.6			
7 38 44	322.0	99.4^		A
	54.0	75.8^		
	129.8	175.2^	+0.09^	
	233.0		+0.04^	
7 41 34	308.2	75.2^		
	37.5	104.8^		
	142.3	180.0^	0.00^	
	Index Below			
	131.8			
7 44 30	227.7	95.9^		B
	322.4	77.5^		
	39.9	173.4^	+0.13^	
	143.0		+0.08^	
7 47 30	219.41	76.1^		
	310.4	102.6^		
	53.0	178.7^	+0.02^	
		Average	+0.06^	

	170	138^
7	42	64^
5		-5^
12	42	59^

7642.5299

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1907phae.proj..584W

March 7, 1907

Index Below IV

	129.2			
7 50 54	232.8	103.6 ^		B
	321.6	78.7 ^		
	40.3	182.3 ^		
		177.7 ^	−0.04 ^	
	142.2			
7 53 54	221.9	79.7 ^	−0.08 ^	
	300.0	107.2 ^		
	55.2	186.9 ^		
		173.1 ^	−0.13 ^	

Index Above

	35.8			
7 57 40	145.5	109.7 ^		A
	229.8	83.5 ^		
	313.3	193.2 ^		
		166.8 ^	−0.25 ^	
	46.9			
	135.0	89.1 ^	−0.32 ^	
	215.0	110.8 ^		
	325.8	199.9 ^		
		160.1 ^	−0.38 ^	

Mean −0.20 ^

8	0	24	
29	160	172	^
7	55	43	^
5		−5	^
12	55	38	^

7642.5386

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1907phae.proj..584W

March 7, 1907

			Index above		V
			33.0		
8	2	32	148.0	115.0^	A
			227.1	88.0^	
			315.1	203.0^	
				157.0^	-0.44^
			45.7		
8	5	52	135.8	90.1^	-0.46^
			213.6	114.8^	
			328.4	204.9^	
				155.1^	-0.48^
			Index Below		
			304.3		
8	8	46	58.6	114.3^	B
			138.5	87.7^	
			226.2	202.0^	
				158.0^	-0.42^
			318.1		
8	11	38	45.2	67.1^	-0.42^
	26	168^	123.2	115.0^	
8	6	72^	238.2	202.1^	
5		-5^		157.9^	-0.42^
13	7	7^			

7642.5466

Mean -0.44^

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1907phae.proj..584W

March 7, 1907

Index Below VI

	303.8		
8 14 50	58.7	114.9°	B
	137.4	90.0°	
	227.4	204.9°	
		155.1° − 0.48°	
	317.2		
8 17 7	49.1	91.9°	−0.50°
	122.3	116.0°	
	238.3	207.9°	
		152.1° − 0.53°	

Index Above

	211.8		
8 20 35	329.8	118.0°	b
	42.9	95.5°	
	138.4	213.5°	
		146.5° − 0.64°	
	222.9		
8 23 25	321.0	98.1°	−0.70°
74 117°	29.8	120.6°	
8 18 59°	150.4	218.7°	
5 −5°		141.3° − 0.75°	
13 18 54°			

Mean −0.60°

J. J. 7h 50m

7642.5548 Fl. A. +6 53

Dec. +82.0

P.A. 16.1 Ser. B

Sprocket −1.5 B

" −0.5 b

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1907phae.proj..584W

March 7 1907

E Auriage Shot J St. Obs Bowe Rec

4 52 +43.6 7" Cap used

8 7

3 15

Index Above

171.5 ← var. dis

191.1 19.6^ A

354.8 13.0^

7.8 32.6^ -4.22^

174.3 -4.20^

187.4 13.1^

351.6 20.2^

11.8 33.3^ -4.17^

Index Below

78.6

102.4 23.8^ B

265.0 14.6^

279.6 38.4^ -3.86^

82.5 -3.86^

98.4 15.9^

262.0 22.4^

284.14 38.3^ -3.86^

Means -4.03^

8 59 54

9 10 15

17 69 69 ^

8 64 64 ^

5 -5 ^

14 4 59 ^

7642.5868

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1907phae.proj..584W

March 7 1907

S. J. 8 40
H. A. +3 43
Dec. + 44.2
P. A. 177.2 Der B
Sprocket -8.5 A
" -7.5 B
" -7.0 b

Double Star No. 59 (Comstock's List) = 6 Lyncis
6 18 +58.2 Phot. R. A. Ob Zone
8 48
2 30 P.A. 120° Dist 3.0± Mags 6.0 9

Measurements on fol. page

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1907phae.proj..584W

March 7, 1907

Index Above A.

352.0	Prec. a brighter dia	
11.9	19.9^	
167.0	27.4^	
194.4	47.3^	3.40^
345.7		3.37^
16.2	30.5^	
171.9	18.0^	
189.9	48.5^	3.34^

Index Below B.

261.5		
280.2	18.7^	
77.8	27.4^	
105.2	46.1^	3.45^
257.3		3.47^
283.8	26.5^	
81.7	18.8^	
100.5	45.3^	3.49^

Means 3.42

9 43 32

9	51	20
	94	52^
9	47	26^
5		−5^
14	47	21^

H's watch used for times tonight.
Watch 5 sec. fast.

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1907phae.proj..564W

March 8, 1907 (Friday)

α Persei

~~α Geminorum~~, Phot. 3 Hr. Obs Bowie Res

4	8	+41.8
6	48	
2	40	

Index Above

317.0 Comp. ~~Star~~ dis.

~~46.4~~ 5.9

147.2 88.9"

211.9 64.7"

153.6" +0.50"

A

~~330.2~~

~~33.6~~ +0.44"

133.2

225.6 92.4"

328.5 67.3"

35.8 159.7" +0.39"

Index Below

55.3

126.7 71.4"

219.9 101.3"

321.2 172.7" +0.14"

B

40.9

140.8 99.9" +0.10"

231.5 77.0"

308.5 176.9" +0.06"

Mean +0.27"

7 51 5

8 4 5

15 55 10 "

7 57 35 "

5 −5 "

12 57 30 "

7643.5400

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1907phae.proj..584W

March 8, 1907

S. J. 7^h 49^m
H. A +3 34
Dec +42.2
P. A 146.5 ber S
Sprocket -2.5 A
" -1.5 S
" -1.0 b

R Z basicop Phot. A. Obs. Some Rec

2	36	+69.0
7	56	
5	20	

Comp. Star = +69° 181 (9.0)

9
9
5
14
76

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1907phae.proj..584W

March 8, 1907

Index 2 & 6

346.2	345.8	par dis.	
17.6	15.3	31.4^	29.5^
168.6	168.5	24.9^	24.9^
193.5	193.4	56.3^	54.4^ −3.08^
		−3.00^	mean −3.04^

B

~~9 12 34~~
~~8 54 40~~

~~349.8~~ ~~−2.95~~
~~14.8~~
163.5
199.2

25.3
35.7
61.0 ~~−2.82~~

Index R & B

252.6		
289.3	36.7^	A
79.3	24.7^	
104.0	61.4^	−2.81^

257.6		−2.82^
282.4	24.8^	
74.1	36.1^	
110.2	60.9^	−2.83^

9 2 33

14 67^
9 7 34^
5 −5^

14 7 29^

~~−2.82~~
become −2.93^

7643.5886 ~~Something~~ a little wrong in second original setto. This setto retaken.

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1907phae.proj..584W

March 8, 1907

S.J. 8 37
H.A 5 54
Dec 69.7
P.A. 25.0 var B
Sprocket -1.5 B
" -0.5 b

Double Star No. 50 (Comstock's List) & Auriage
~~5 10 +41.1~~ Phot. R & Obs. Bowie Rec.
5 9 +40.0
9 9
4 0

P.A. 5° Dist. 2.'3 ± Image. 5.0 9.5

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1907phae.proj..584W

March 8, 1907.

Index R.A. A.

353.4 Southern & brighter dis

10 0 48

8.0	14.6^	
173.5	12.3^	
185.8	26.9^	4.64^

354.6 4.66^

6.8	12.2^	
173.5	14.1^	
187.6	26.3^	4.69^

Index L.S. B.

262.2

279.0	16.8^	
84.0	12.0^	
96.0	28.8^	4.49^

264.6 4.58^

276.0	11.4^	
82.4	15.0^	
97.4	26.4^	4.68^

Mean 4.62^

10	8	50	
	6	98	^
10	4	49	^
5		- 5	^
15	4	44	^

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1907phae.proj..584W

March 8, 1907

Double Star No. 63 (Comstock's List) = 56 Auriage
6 36 +43.7 Phot. R A. Obs. Bouvie Rec
9 36 P.A. 20° Dist. 0.7 Mags. 5.9 9.0
3 0

Index R & A.

165.5 Southern and brighter dia
10 36 36 192.9
344.5 27.4"
16.3 31.8"
59.2" 2.89"

164.2 2.94"
193.6 29.4"
347.4 5.5 27.3" 6
12.8 56.7" 2.99"

Index L & B.

77.5
103.0 25.5"
256.8 27.6"
284.4 53.1" 3.14"

76.0 3.08"
10 45 45 104.7 28.7"
81 81 " 257.2 27.1"
10 40 70 " 284.3 55.8" 3.02"
5 -5 "
15 41 5 " Mean 3.01"

It's watch used for times
Watch 5 sec. fast

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1907phae.proj..584W

March 9, 1907 (Saturday)

S. ~~a~~ b. 1182			S. 394		
6	19	37.8	6	20	0.0
6	20	37.8	6	21	0.0

Reap. Jap. III Phot. ℞ Ft. Obs. Bowie Rec. Comp. with other Sat. on same fol. side = Sat. II

6	54	18^6	53	51			Snap.
	54	23^6	53	56			Seen
	55	3^	54	36	+2.6^	33.5^	73.5
	55	23^		55	+2.4^	36.5^	107.0
	55	39^	55	11	+2.2^	40.7^	70.5
	55	50^		22	+1.9^	45.7^	111.2
	56	0^		32	+1.6^	50.3^	65.5
	56	18^		50	+1.5^	53.8^	115.8
	56	32^	56	4	+1.3^	57.8^	62.0
	56	45^		17	+1.1^	61.0^	119.8
	57	0^		32	+1.0^	64.0^	58.8
	57	18^		50	+0.9^	67.4^	122.8
	57	37^	57	9	+0.7^	71.8^	55.4
	57	48^		20	+0.6^	74.8^	127.2
	58	1^		33	+0.6^	75.4^	53.1 2.4
	58	18^		50	+0.4^	80.8^	127.8

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1907phae.proj..584W

March 9, 1907

6	58	34^	6
	58	46^	
6	59	0^	
		+28^	
6	59	28^	6
7	0.	13^	7
		+25	
7	0	41^	
7	1	29^	
		+29^	
7	1	58^	
7	2	43^	
		+29^	
7	3	12^	
7	4	4^	
		+29^	
7	4	33^	
7	5	16^	
		+29^	
7	5	45^	

58	6	+0.2^	84.1^	47.0
	18			131.1
	30			46.0
	52		86.8^	
			89.0^	132.8
59	10	+0.1^	175.8^	
			87.9^	45.9
	28			134.0
	45			42.7
0	5		91.3^	
			93.1^	134.0
	22		184.4^	42.0
	40	-0.1^	92.2^	135.1
1	6			41.6
	23		95.2^	
			96.5^	136.8
	36		191.7^	41.0
	52	-0.2^	95.8^	137.5
2	14			40.5
	33		96.5^	
			97.0^	137.0
	47		193.5^	41.0
	5	-0.3^	96.8^	
3	19			138.0
	43			40.0
	54		97.5^	
			98.3^	137.5
4	13		195.8^	39.8
	27	-0.3^	97.9^	138.1
	47			39.0
			100.0^	
5	2		99.9^	139.0
			199.9^	
		-0.4^	100.0^	

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1907phae.proj..584W

March 9, 1907

7	5	29		39.0	1
		48		138.9	
	6	8		39.1	
7 6 35^		23	100.7^ 99.5^	139.8	2
+29^		47	200.2^ -0.4^	100.1^ 40.0	2
7 7 4^	7	1		139.5	
-	8	10	99.6^	40.2	
7 8 36^		31	98.9^	139.8	
+30^		45	198.5^ -0.4^	99.2^ 39.1	3
7 9 6^		58		138.0	
	9	28		39.0	
7 9 36^		45	100.0^ 100.5^	139.0	
+30^		24	200.5^ -0.4^	100.2^ 39.0	4
7 10 6^		46		139.5	
count	12	4		39.5	
7 12 29^		24	99.5^ 99.6^	139.0	
+30^		37	199.1^ -0.4^	99.6 39.2	5
7 12 59^		52		138.8	
	13	10	98.6^	39.6	
7 13 34^		29	98.0^	138.2	
+30^		43	196.6^ -0.3^	98.3^ 40.5	6
7 14 4^		55		138.5	
-	14	16	98.9^	39.8	
7 14 39^		31	101.0^	138.7	
+31^		46	199.9^ -0.4^	100.0^ 38.9	7
7 15 10^	15	3		139.9	

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1907phae.proj..584W

March 9, 1907

		7				
7	15	43^	15	18		38.8
		+31^		32	100.1^ 99.9^	138.9
7	16	14^		54	200.0^ −0.4^ 100.0^	39.2
			16	9		139.1
				33		39.0
7	16	55^		46	100.0^ 100.6^	139.0
		+31^			200.6^	
7	17	26^	17	2	−0.4^ 100.3^	38.5
				20		139.1
			Limit of vis.			
			17	55		77.0
7	18	28^	18	16	23.4^ 23.0^	100.4
		+31^	"	41	46.4^	76.5
7	18	59^			+3.4^ 23.2^	
			"	59		99.5

S. & b. 1182

7	23	28.0
7	24	28.0
7	25	27.6

S. 394

7	24	0.0
7	25	0.0
7	26	0.0

At time of eclipse Jup. high and nearly on the meridian. Sat. III reap. quite

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1907phae.proj...584

March 9, 1907

close to Sat. II being a little to the left and below Sat. II as indicated by the Almanac. Seeing pretty good although a little blurry at times. At those times when images became blurry observer waited a little for them to become steady. Although Sat. III was quite close to Sat. II, by a proper disposition of the images H. was able to obtain, as he considers, very satisfactory results. Eclipse considered good.

∴ 4m free. eclipse.

From	6h	48m	12s.	to	6h	54m	3s.	add	27, Rees.
"	6	54	37.	"	7	1	1.	"	28. "
"	7	1	1.	"	7	7	26.	"	29. "
"	7	7	26.	"	7	13	51.	"	30. "
"	7	13	51.	"	7	20	16.	"	31 "

Double Star No. 24 (Comstock's List) = 6 Persei
Phot. R. H. Obs. Bowie Rec

2 4 +50.4
7 29
5 25

P.A. 70° Dist. 2.5± Mags. 5.2 10.1

Measurements on fol. page

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1907phae.proj..584W

March 9, 1907

Index R & S A.

~~266.2~~

263.4 Prec. a higher dis

276.0	12.6^	
85.5	8.6^	
94.1	21.2^	5.16^

265.3		5.06^
275.2	9.9^	
83.6	13.3^	
96.9	23.2^	4.97^

Index Lick B.

1725		
187.5	15.0^	
355.3	9.2^	
4.5	24.2^	4.87^

176.1		4.91^
184.9	8.8^	
352.4	14.6^	
7.0	23.4^	4.95^

Mean 4.98^

8 22 32

8 29 30

51 62^

8 25 61^

5 -10^

13 25 51^

9
17
8
5
14

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1907phae.proj..584

March 9, 1907

Double Star No. 32 (Comstock's List) = 16 Persei

2 42 +37.7 Phot R & Obs. Bowie Res

8 2

5 20

The fainter star measured with the brighter star is the preceding, slightly southern, and a little the brighter of two somewhat faint stars. The fainter star measured with the bright star checks in P.A. and Dist. while the P.A. of the other star nearby, is too small. This determination was made with the square bar micrometer.

Index Left B.

176.5 brighter dis

8 58 28

184.3 7.8'

357.7 5.2'

2.9 13.0' 6.23'

6.14'

177.5

183.5 6.0'

356.5 8.1'

4.6 14.1' 6.05'

Index Right A.

86.6

94.4 7.8'

267.4 6.2'

273.6 14.0' 6.07'

6.06'

87.5

93.6 6.1'

266.4 8.1'

274.5 14.2' 6.04'

Mean 6.10'

9 6 2

17 64 30 '

8 62 15 '

5 -10 '

14 2 5 '

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1907phae.proj..584W

March 9, 1907

Double Star No. 36 (Comstock's List) = 43 Persei

3 47 +50.2 Phot. R. A. Obs. Bowie Ref.
8 42
4 55

P. A. 30° Dist. 1'.4 ± Mags. 5.1 & 10.2

Index L & B B.

263.4 South. prec. & brighter dis

9 25 33

276.1	12.7"	
84.8	9.7"	
94.5	22.4"	5.04"

264.5		5.04"
274.2	9.7"	
84.0	12.6"	
96.6	22.3"	5.05"

Index Rect A.

173.5		
186.6	13.1"	
354.8	9.8"	
4.6	22.9"	4.99"

175.6		5.12"
183.89	8.3"	
353.4	12.1"	
5.5	20.4"	5.25"

Mean 5.08"

9 32 18
57 51"
9. 28 56"
5 -10"
14 28 46"

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1907phae.proj..5847

March 9, 1907.

Double Star No. 40 (Comstock's List) = 0Σ531 (second pair)

3 59 +37.7 Phot. R. H. Obs Bowie Rec
9 4 R.A. 210 Dist 4.0± Mags 7.0 8.0
5 5 Region thoroughly identified
Principal components not seen to be double

Index Rect A.

56.0 Northern & brighter dis.

9 53 40

123.4 67.4^
244.9 49.3^
294.2 116.7^ 1.27^

65.0 1.22^
116,5 51.5^
234.7 69.3^
304.0 120.8^ 1.18^

Index Cor B.

329.4
34.1 64.7^
157.0 47.0^
204.0 111.7^ 1.38^

336.0 1.36^
25.3 49.3^
145.5 64.0^
212.5 113.3^ 1.34^

Mean 1.29^

10 0 52

19 53 92 ^
9 56 76 ^
5 -10 ^
14 57 6 ^

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1907phae.proj..584W

March 9, 1907

Noticed at 9.30 a low auroral arch in North.

At 10.15 arch still continues. Arch moderately bright, but not strongly bright

It's a watch used for times tonight..
Watch 10 sec fast.

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1907phae.proj..584

March 11, 1907 (Monday)

R Mon Monocerotis Phot. 3 H. Obs. Bowie Sec

6	50	-8.0
6	56	
0	6	

Index Rect

324.9	Comp Star dis	
39.2	74.3"	A
152.2	58.1"	
210.3	132.4" + 0.93"	

7 56 50

334.0		+0.93"
29.5	55.5"	
143.1	76.9"	
220.0	132.4" + 0.93"	

Index L + B

230.2		
311.1	80.9"	B
57.1	65.1"	
122.2	146.0" + 0.65"	

237.6		+0.64"
303.5	65.9"	
51.0	81.2"	
132.2	147.1" + 0.63"	

Means +0.78"

8 5 0

15	61	50	"
75	60	55	"
		-12	"
13	0	43	"

7646.5422

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1907phae.proj..584W

March 11, 1907.

S. T. 7^h 43^m
H. A. +0 50
Dec. -7.0
P. A. 60.5 Ser. 8
Sprocket -2.5 8
" -1.5 6

8 22 Low auroral arch in North (moderately bright) the altitude being about 1/6 that of ~~the~~ Pole ~~Star~~

Double Star No. 34 (Comstock's List) = 7 Jauri

3	26	+24.0
7	56	
4	30	

Phot. R. H. Obs. Bowie Rec.

P. d 55 Dist. 0.'4 ± Image. 6 + 10.5

8
8
5
13

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1907phae.proj..584W

March 11, 1907

Index Rod A.

351.4 Southern & brighter disc

δ 40 15

9.5	18.1′	
168.0	24.0′	
192.0	42.1′	3.65′

3495 3.73′

11.3	21.8′	
171.0	17.4′	
188.4	39.2′	3.81′

Index L & B B.

261.2

280.0	18.8′	
78.5	23.3′	
101.8	42.1′	3.65′

258.0 3.62′

252.1	24.1′	
79.9	19.3′	
99.2	43.4′	3.59′

δ 49 55

89 70′

δ 44 65′

5 -12′

13 44 53′

Means 3.65′

δ - 53 Auroral arch in north somewhat brighter than before, and summits of arch a little higher up

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1907phae.proj..584W

March 11, 1907.

Double Star Nr. 54 (Comstock's List) = South 503

5 39 +13.9 Phot. R Nr Obs Bowie Rec
8 49
3 10 P. A. 330° Dist. 12" Mags. 7.0 + 8.6.

Index L & B:

66.4 Southern & brighter, dis

9 29 15

114.3	47.9^	
243.0	55.2^	
298.2	103.1^	1.58^

65.1 1.69^

112.4	47.3^	
247.9	47.0^	
294.9	94.3^	1.80^

Index R & A.

336.2

23.0	46.8^	
152.7	52.2^	
204.9	99.0^	1.68^

333.3 1.70^

9 36 30

26.8	53.5^	
157.3	44.2^	
201.6	97.8^	1.71^

65 48^
9. 32 54^
5 -12^
14 32 42^

Mean 1.70^

9 45 0 Auroral lights more pronounced with some tendency to streamers.

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1907phae..proj..584W

March 11, 1907.

Double Star No. 56 (Comstock's List) = θ Aurigae
5 50 +37.2 Obs. R. H. Obs. Source
9 15 P.A. 345° Dist. 2.2 ± Mags. 3.0 & 10.0
3 25 Combined light of components used in measurement

Index R. A. d.

9 52 48

357.7 ← Southern & brighter dis
2.3 4.6^
178.6 3.4^
182.0 8.0^ 7.25^.

358.7 7.36^
2.3 3.6^
178.3 3.8^
182.1 7.4^ 7.45^

Index L. & B. B.

267.4
272.3 4.9^
89.+8.5 2.7^
91.2 7.6^ 7.40^

268.0 7.35^
272.0 4.0^
88.2 3.7^
91.9 7.7^ 7.37^

10 2 0
19 54 48 ^
9 57 24 ^
5 -12 ^
14 57 12 ^

Mean 7.37^

16 7 0 Auroral light ~~still~~ pronounced in North

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1907phae.proj..584W

March 11, 1907

Double Star No 60 (Comstock's List) = δ Lyncis
6 25 +61.6 Phot. R Gr. Obs. Bowie Rec
~~19~~ 40
~~3~~ 15 P. A 80 Dist 2.7 ± Mags 6.0 & 8.1.

Index Below B.

247.0 Rec + brighter dis -
10 19 34 290.2 43.2"
78.0 27.5"
105.5 70.7" 2.48"

256.7 2.53"
285.2 28.5"
71.4 39.3"
110.7 67.8" 2.58"

Index Above A.

163.0
199.0 36.0"
348.7 26.9"
151.6 62.9" 2.75"

166.0 2.66"
10 24 35 196.7 30.7"
43 69" 341.0 37.1"
10 21 64" 67.8" 2.58"
5 -12"
15 21 52" 18.1

Mean 2.60"

10 32 0 Auroral arch a little less pronounced in North but still moderately bright
It's watch used for times
Watch 12 sec. fast

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1907phac.proj..584W

March 13, 1907 (Wednesday)

	3 Orionis	Phot.	H Obs Bowie Res.
	5	25 − 5.5	
	8	25	
	3	0	

9 40 o Region identified but it is so hazy and cloudy that variable is not seen. An eight magn. star near the variable was however at times quite bright, as well as a 7.8 magn. following it, hence H. would have ~~the~~ impression that the variable must be somewhat fainter that ninth magn.

9 45 o Sky now all thickly cloudy through this region.

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1907phae.proj..584W

March 15, 1907 (Friday)

RZ Cassiop Phot. 3 ft Obs. Bowie Rec

2	36	+69.0
7	1	
4	25	

Abandoned

Sky pretty cloudy everywhere except to low in ~~the~~ south

3 Orionis Phot. 3 ft. Obs. Bowie Rec

5	25	-5.5
7	35	
2	10	

All cloudy again

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1907phaa.proj..5647

March 15, 1907.

B. & b. 1182 B. 394

8 26 37.1 8 27 0.0

8 27 37.1 8 28 0.0

Y Orionis. Phot. T. H. obs. Bowie rec.

R & t

133.1 b comp & stars dec.

8 39 49 229.2

320.5

38.0

Stopped by clouds.

R

Reap Jup. I Phot. H Obs Bowie Rec

b comp. with other Sat. on same fol. side = Sat. IV

8 48 0 Sky thickly cloudy everywhere. No stars visible. Jupiter invisible.

9 3 39^ 9 3 14 Seen.

3 44^ 9 3 19 Better seen.

3 47^ 3 clouds 22 Still " "

4 34^ 4 9 0.0^ 89.7^ 137.8

clouds thicker

5 31^ 5 6 -0.4^ 101.5^ 227.5

clouds

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1907phae.proj..584W

March 15, 1907.

9	5	49^	9	5	24	−0.6^	105.0^	126.0	
	6	10^			45	−0.7^	107.5^	231.0	9
	6	31^		6	6	−0.9^	112.5^	123.5	9
	6	44^			19	−0.9^	113.0^	236.0	
	6	56^			31	−0.8^	111.5^	123.0	
	7	11^			46	−0.8^	109.5^	234.5	9
	7	29^		7	4	−0.7^	108.5^	125.0	9
	7	46^			21			233.5	

9	7	56^			33		112.0^	123.5	
		+25^			48		111.9^	235.5	
9	8	21		8	5	−0.9^	223.9^ 112.0^	125.0	1
					20			236.9	
					35			125.0 4.2	
9	9	0^			49		111.3^	235.5	
		+25^					111.8^		
9	9	25^		9	9	−0.8^	223.1^ 111.6^	123.2	2

Islands again

				9	29			235.0	
					45			123.5 4.2	
9	10	12^					110.8^		
		+25^		10	2		109.2^	235.0	
9	10	37^		"	23	−0.8^	220.0^ 110.0^	125.7	3
				"	36			234.9	
				10	55			125.0	
9	11	42^		11	9		110.0^	235.0	
		+25^					109.6^		
9	12	7^		Islands again			219.6^		4
				12	8	−0.8^	109.8^	124.2 5	
				"	36			234.8	

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1907phae.proj..584M

March 15, 1907

			9	12	51	111.0^	124.0
9	13	35 ^		13	7	110.4^	235.0
		+25 ^				221.4^	
9	14	0 ^		14	5	−0.8^110.7^	124.8
				"	16		235.2
				"	31	111.3^	124.5
9	14	52 ^		"	45	110.0^	235.8
		+25 ^				221.3^	
9	15	17 ^		"	57	−0.8^110.6^	125.2
				15	14		235.2
				"	33		124.1

6

Clouds again.

18 15 Sky thickly cloudy.

Stopped by clouds from getting further observations on constants.

In previous eclipse

From 4h 59m 4s. to 9h 14m 44s. add 25 secs.

S. & b. 1182

9	28	34.0
9	29	34.0

S. 394

9	29	0.0
9	30	0.0

Quite cloudy a little before time of eclipse. At that time a little preceding this time it became somewhat clearer. Continually troubled during

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1907phae.proj..584W

March 15, 1907.

eclipse and especially during varying part of same, by clouds. These prevented as many setting as usual, during time of variation ~~Eclips~~ Observations ~~stopped after~~ sixth sett. for constants. The settings throughout eclipse that were ~~actually~~ obtained, are considered good as observer waiting before each setting until ~~the~~ Stars were well seen as it became suddenly completely cloudy limits of visibility could not be taken

3 Orionis again

5	28	-5.5
9	33	
4	5	

Sky still much cloudy.

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1907phaO.proj..564W

March 15, 1907.

B. & b. 1182			B. 394		
11	15	35.5	11	16	0.0
11	16	35.5	11	17	0.0

Dis. Jup. IV Phot. ~~&~~ H. Obs. Bowie Rec.
bomp. with Sats. on same fol. side = Sats. II

h	m		
11	32	blanks	
11	32	13^s	56.0

Sats. gone

As soon as H. began to observe eclipse it clouded up and remained so through whole of eclipse time About 11.50 a sudden squall came and it began to snow and rain

12 15 0 ~~Jup. invis.~~ It is now ~~the~~ theoretical time for ~~the~~ dis of Jup. Jup. invisible sky thickly cloudy everywhere no stars visible and snowy and rainy condition continues

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1907phae.proj..584W

March 16, 1907. (Saturday)

8 & b 1182			8.394		
6	50	44.5	6	50	0.0
6	51	44.5	6	51	0.0

Dia. Jup. III Phot. R Ht. Obs. Bovie Rec.
b comp. with Sat. on prec. side = Sat. I

7 14 0 Somewhat cloudy. Sats. dim.

7	14	54			212.9	
			Clouds	114.1^		
				113.0^		
7 16 4^	15	39		227.1^	327.0	1
-43^						
7 15 21^	16	19	-0.9^	113.6^	213.5	
	17	23			326.5	
	18	0	Clouds thicker			
7 20 4^	19	16		108.9^	216.1	
-43^	"	46		110.6^	325.0	
7 19 21				219.5^		2
	20	24	-0.8^	109.8^	215.7	
	"	50			326.3	
	21	20		110.3^	215.0	
7 22 19^	"	52		110.3^	325.3	3
-43^				220.6^		
7 21 36^			-0.8^	110.3^		

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1907phae.proj..584M

March 16, 1907.

7	22	42		215.2	3	
	23	21		325.5		
	24	Sky somewhat clearer				
	~~24~~	~~30~~		~~224.9~~		
	"	~~55~~		~~325.0~~		
	26	20	109.9^	215.2		
7 26 52 ^	"	48	109.7^	325.1	4	
-42 ^	27	3	219.6^	215.2		
7 26 10 ^	"	16	-0.8^109.8^	324.9		
	29	3	109.4^	215.4		
7 29 31 ^	"	19	109.8^	324.8		
-42 ^	"	38	219.2^	214.6	5	
7 28 49 ^	30	3	-0.8^109.6^	324.4		
	"	21	111.1^	214.0		
7 30 45 ^	"	36	110.4^	325.1		
-42 ^	"	53	221.5^	215.1	6	
7 30 3 ^	31	9	-0.8^110.8^	325.5		
	"	28		215.1		
7 31 52 ^	"	44	109.6^	324.7		
-42 ^	"	59	110.5^	214.0	7	
7 31 10 ^	32	17	220.1^	324.5		
	"	55	-0.8^110.0^	214.8		
7 33 22 ^	33	14	110.7^	325.5		
-42 ^	"	29	110.1^	214.5	8	
7 32 40 ^	"	50	220.8^	324.6		
			-0.8^110.4^			

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1907phae.proj..584W

March 16, 1907

7	34	26			7
		-42			
7	33	44			
7	35	32			
		-42			
7	34	50			
7	36	49			
		-42			
7	36	7			
7	37	55			
		-42			
7	37	13			
7	39	26			
		-42			
7	38	44			
7.	40	42			
		-42			
7	40	0			

34	3		214.1	
"	18	110.9 / 109.8	325.0	9
"	32	220.7 / -0.8 / 110.4	214.5	
"	50		324.3	
35	7		214.1	
"	23	110.1 / 109.6	324.2	
"	39	219.7 / -0.8 / 109.8	214.8	10
"	56		324.4	
36	+2			
"	24		214.8	
"	40	110.2 / 108.1	325.0	11
37	1	218.3 / -0.7 / 109.2	216.0	
"	12		324.1	
"	29		214.5	
"	45	110.7 / 110.4	325.2	
38	3	221.1 / -0.8 / 110.6	215.1	12
"	22		325.5	
"	59		214.9	
39	16	108.1 / 105.6	323.0	
"	36	213.7 / -0.6 / 106.8	216.5	13
"	52		322.1	
40	6		216.9	
"	29	104.1 / 101.2	321.0	
"	Somewhat more cloudy again			14
40	58	205.3 / -0.5 / 102.6	219.3	
41	15		320.5	

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1907phae.proj..584M

March 16, 1907

				7
7	42	41	^	7
		-42	^	
7	41	59.	^	
			-	
7	44	56	^	
		-41	^	
7	44	15	^	
7	47	30	^	
		-41	^	
7	46	49	^	
7	48	59	^	
		-41	^	
7	48	18	^	
7	49	36	^	
	49	51	^	
	50	36	^	
	51	57	^	
	52	17	^	

41	49		104.0^	217.0
42	25		100.6^	321.0
			204.6^	
"	55	-0.5^	102.3^	220.9
43	clouds thicker			
"	36			321.5
44	18			218.5
"	45		102.3^	320.8
45	clouds		100.1^	
			202.4^	
"	12	-0.4^	101.2^	221.0
"	29			321.1
"	50, clouds thicker			
46	30		99.2^	220.1
47	25		94.5^	319.3
"	49		193.7^	2225
48	14	-0.3^	96.8^	317.0
"	28			225.0
"	47		87.8^	312.8
49	11		85.1^	227.0
"	29	+0.1^	172.9^	312.1
"	55	clouds thicker again	86.4^	
50	17	+0.4^	79.4^	230.8
"	32	+0.6^	75.3^	310.2
51	17	+1.1^	61.6^	234.29
52	38	+1.3^	57.5^	296.5
"	58			239.0
~~53~~	~~46~~			2
~~54~~	2			

Not seen later.

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1907phae.proj..584w

March 16, 1907.
Limit of visibility

δ — 1 — 16 — 243.1
~~38~~ ~~285.0~~

Too cloudy for L. V.

B. & b. 1182			B. 394		
δ	δ	39.9	δ	δ	0.0
δ	9	39.7	δ	9	0.0
δ	10	39.8	δ	10	0.0
δ	11	39.8	δ	11	0.0

Last ~~two~~ above clock comparisons considered ~~the~~ best.

Observations were begun rather early, but even before this there were some clouds. The clouds were not of a hard fragmentary character but rather ~~feathery~~ and varying in density, sometimes being thicker and sometimes being thinner. In ~~the~~ early part of observations for constants, the clouds were somewhat troublesome, but in the larger part of observations for constants, later, ~~the~~ sky was clearer. About ~~the~~ times the Sats. began to diminish in brightness the clouds became more troublesome so that part of these observations had to be made through some cloud. The clouds became so dense at times that observer had to wait, but by waiting and exercising much

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1907phae.proj..584M

March 16, 1907.

care, the observations during variation are considered pretty good. After the last setting the sky was rather more cloudy again, so that nothing more could be done. The Sat. however was casually seen to be very faint. Limits of Vis. could not be satisfactorily taken.

∴ In previous eclipse

From 6h 51m 44.5s to 7h 4m 44.5s subtract. 44 Green.

7	4	45.1	"	7	25	45.0	" 43. "
7	25	45.1	"	7	42	45.1	" 42. "
7	42	45.1	"	7	59	46.1	" 41. "
7	59	46.1	"	8	11	40.1	" 40. "

J Orionis Phot. J H. Obs. Bowie Rea

5	25	-5.5
8	20	
2	52	

Measurements on fol. page

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1907phae.proj..584W

March 16, 1907.

Index R & B

	133.0	comp. Star dia
8 46 55	227.8	94.8^
	323.0	75.4^
	38.4	170.2^ +0.19^

	144.3	+0.30^
	216.5	72.2^
	319.0	87.0^
	46.0	159.2^ +0.40^

Index L & B

	41.7	
	142.0	100.3^
	232.0	76.0^
	308.0	176.3^ +0.07^

	51.6	+0.06^
	130.7	79.1^
	220.1	89.0^
	318.1	177.1^ +0.05^

9	1	18	
17	47	73	^
8	53	66	^
5		-18	^
13	53	48	^

Mean +0.18^

L. J. 9^d 6^m

R. A. +3 34

Dec. -5.4

C. A. 92.5 Ver. L

L sprockets -0.5 L

" +0.5 b

Observations quite dif. on account of the fact that the sky is ~~not for~~ rather hazy ~~footy clear~~. The region is rather low and both the comp. star and vars. rather faint.

7651.5791

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1907phae.proj..584W

March 16, 1907.

Double Star No. 46 (Comstock List) = 13 Orionis.
5 2 + 9.6 Phot. R. Sr. Obs Bowie Rec
9 22
4 20 P.A. 265° Dist. 2.2± Mags. 6.0 & 10.2
Index R & B.

347.0 For a brighter dis
9 35 48 14.5 27.5^
171.3 18.0^
189.3 45.5^ 3.48^

351.5 3.52^
9.8 18.3^
167.0 25.7^
192.7 44.0^ 3.56^

Index Cat. B.

254.4
285.0 20.6^
81.6 17.4^
99.0 48.0^ 3.36^

261.0 3.34^
279.9 18.9^
74.5 29.8^
104.3 48.7^ 3.33^

9 45 20
83 68^
9 41 64^
5 -18^
14 41 46^

Mean 3.43^

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1907phae.proj..584W

March 16, 1907

Double Star No. 62 (Comstock's List) = 0 Σ 154

6 40 +41.9 Phot. R. H. Obs. Bowie Rec

9 50

3 10

Index Lock B.

165.0 Brighter dis.

10 12 30

193.0 28.0"

329.9 54.0"

82.0" 2.14"

23.9

156.6 2.28"

203.0 46.4"

346.4 26.1"

72.5" 2.43"

12.5

Index Rock A.

76.6

104.0 27.4"

241.5 53.7"

81.1" 2.16"

295.2

65.5 2.20"

10 19 25

114.0 48.5"

31 55"

254.0 30.4"

10 15 58"

284.4 78.9" 2.23"

5 -18"

15 15 40"

Mean 2.24"

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1907phae.proj..584M

March 16, 1907

S. a b. 1182			S. 394		
10	26	41.0	10	26	0.0
10	27	41.0	10	27	0.0
10	28	40.9	10	28	0.0

Reap. Jup. III Phot. R. H. Obs. Bowie Rec.
Comp. with nearer of two Sats. (before eclipse)
on same fol. side = Sat. II

10	55	31^	10	56	10		Spec
	55	46^		"	25	+2.9^ 29.0	256.0
	55	57^		"	36	+2.7^ 32.0	285.0
	56	19^		"	58	+2.4^ 36.0	253.0
	56	31^		57	10	+2.3^ 38.9	289.0
	56	51^		"	30	+2.2^ 39.7	250.1
	57	0^		"	39	+2.2^ 40.2	289.8
	57	13^		"	52	+1.9^ 45.3	249.6
	57	27^		58	6	+1.5^ 53.7	294.9
	57	45^		"	24	+1.2^ 60.1	241.2
	57	56^		"	35	+1.0^ 64.8	301.3
	58	6^		"	45	+0.9^ 66.9	236.5
	58	18^		"	57	+0.8^ 70.2	303.4
	58	34^		59	13	+0.7^ 73.0	233.2
					23		3

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1907phae.proj..584W

March 16, 1907.

10	58	57^	10		
			11		
11	0	34^			
		-39^			
10	59	55^			
11	1	48^			
		-38^			
11	1	10^			
11	2	46^			
		-38^			
11	2	8^			
11	3	50^			
		-38^			
11	3	12^			
11	4	5^			
		-38^			
11	4	26^			
11	5	4^			
		-38^			
11	5	27^			
11	6	5^			
		-38^			
11	5	27^			

59	36		306.2
	47		
0	7	84.1^	224.4
0	20	93.2^	307.5
"	47	177.3^	222.0
1	2	+0.1^88.6^	315.2
"	27	93.2^	222.8
"	41	94.0^	316.0
"	54	187.2^	221.5
2	9	-0.1^93.6^	315.5
	23	95.8^	220.4
	36	100.2^	316.2
	57	196.0^	218.2
3	10	-0.3^98.0^	318.4
	24	98.7^	219.1
	37	98.7^	317.8
	54	197.4^	219.5
4	24	-0.3^98.7^	318.2
	39	103.5^	217.5
	56	104.8^	321.0
5	12	208.3^	217.2
	29	-0.5^104.2^	322.0
	40	104.0^	219.0
	52	105.1^	323.0
6	15	209.1^	216.9
	32	-0.6^104.6^	322.0

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1907phae.proj..584M

March 16, 1907.

11	7	8		6	44		215.9	
		-38				105.2		
11	6	30		7	3	105.7	321.1	1
					16	210.9	215.8	
					30	-0.6 105.4	321.5	
					47		215.6	
11	8	10		8	3	105.4	321.0	
		-38				106.0		
11	7	32			19	211.4	216.0	2
					30	-0.6 105.7	322.0	
					44		216.80	
11	9	2				106.3		
		-38			57	107.5	322.3	
11	8	24		9	9	213.8	215.3	3
					20	-0.6 106.9	322.8	
					34		217.0	
11	9	58				105.5		
		-38			51	105.3	322.5	
11	9	20		10	5	210.8	216.8	4
					21	-0.6 105.4	322.1	
					30		216.0	
11	11	2				106.2		
		-38			58	106.7	322.2	
11	10	24		11	15	212.9	216.1	5
					27	-0.6 106.4	322.8	
					48		215.8	
11	12	15				107.4		
		-38			59	106.9	323.2	
11	11	37		12	29	214.3	216.0	6
					45	-0.7 107.2	322.9	
				13	0		217.0	
11	13	26				105.7		
		-38			8	105.1	322.47	7
11	12	48				210.8		
						-0.6 105.4		

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1907phae.proj..584W

March 16, 1907

			13	41	216.8
				54	321.9
			14	7	105.6^ 216.5
			"	25	106.1^ 322.1
					211.7^
			15	37	−0.6^ 105.8 215.8
			16	4	321.9
			"	21	104.8^ 217.2
			"	44	105.0^ 322.0
			"	56	209.8^ 216.5
					−0.6^ 104.9^
			17	17	321.5
			"	41	217.0
			"	57	105.0^ 322.0
			18	25	104.0^ 217.5
					209.0^
			"	40	−0.6^ 104.5^ 321.5
			"	54	104.2^ 217.7
			19	9	105.1^ 321.9
			"	51	209.3^ 217.5
					−0.6^ 104.6^
			20	6	322.6

Limit of Vis.

			21	30	253.50
			"	59	31.7^ 284.7
					33.1^
			22	15	64.8^ 255.0
			"	47	+2.7^ 32.4^ 288.1

11	15	3	^
		−38	^
11	14	25	^
11	16	50	^
		−37	^
11	16	13	^
11	18	11	^
		−37	^
11	17	34	^
11	19	30	^
		−37	^
11	18	53	^
11	22	8	^
		−37	^
11	21	31	^

Sat. III reap. in about position indicated in Almanac Seeing pretty good. Sky clear.

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March 16, 1907

In double star measurements tonight Ks watch used for times
Watch 18 sec. fast.

	B. & b. 1182			B. 394	
11	35	36.0	11	35	0.0
11	36	36.0	11	36	0.0
11	37	36.0	11	37	0.0

In previous eclipse

From $10^h\ 34^m\ 9^s$ to $10^h\ 47^m\ 48^s$ subtract 40. secs.
" 10 47 48. " 11 1 28. " 39. "
" 11 1 28. " 11 15 7. " 38. "
" 11 15 7. " 11 28 46. " 37. "

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1907phae.proj..584W

March 18, 1907 (Monday)

o beta Phot. & H. Obs. Bowie Rec.

2 12 −3.6
7 12
5 0

Index Le A

348.4 var. dis

7 23 0

13.7 25.3^
171.2 19.3^
190.5 44.6^ −3.53^

350.7 −3.54^
10.3 19.6^
168.2 24.6^
192.8 44.2^ −3.55

Index Re B

256.8
283.3 26.5^
80.1 18.9^
99.0 45.4^ −3.49

261.0 −3.51^

7 30 8

279.5 18.5^
77.6 26.0^
103.6 44.5^ −3.53

53 8^
7 26 34^
5 −12^
12 26 22^

Mean −3.52^

7653.5184

Region rather low, some moonlight and a slight haze, but the greatest possible care exercised and settings made very slowly, watching for the best intervals of

1907phaa.proj..584W

March 18, 1907.

seeing so that observations are considered pretty good.

QZ b assiop Phot. J H. Obs. Bowie Rec.

2	36	+69.0
7	51	
5.	15	

Index Le A

	165.6	var dis
δ 9 2	196.9	31.3"
	348.5	23.9"
	12.4	55.2" −3.05"

	170.0	−3.04"
	193.0	23.0"
	346.0	33.0"
	19.0	56.0" −3.02"

Index Re B

	71.8	
	109.7	37.9"
	257.9	23.5"
	281.4	61.4" −2.81"

	79.8	−2.80"
	103.7	23.9"
	252.3	37.9"
	290.2	61.8" −2.79"

Mean −2.92"

δ	20	22	
	29	24	"
8	14	42	"
5		−12	"
13	14	30	"

7653.5518

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1907phae.proj..584W

March 15, 1907

S. T. 8^h 25^m
H. A. +5 44
Dec. +69.6
P. N. 208.7 Ver. 8
Sprocket −1.5 8
" −0.5 b

R U Monocerotis Phot. J H. Obs. Bowie Rec

6	50	−8.0
8	50	
2	00	

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1907phad.proj..584W

March 18, 1907

Index R & A

9 8 48

324.4	
40.0 ←	comp. star dis.
148.8	75.6
214.4	65.6
	141.2 + 0.75

A

328.7	+ 0.81
29.0	60.3
142.8	74.8
217.6	135.1 + 0.87

Index L & B

227.6	114.7
342.3	70.7
	185.4
52.9	174.6 − 0.10
123.6	Means + 0.38

B

9	16	42±
	24	96
9	12	48
5		−12
14	12	36

Stopped by clouds. Sky hazy throughout group and observations in third set especially dif.

7653.5921

S. J. 9h 19m
L. A. + 2 29
Dec. −7.0
P. A. 60.0
Sprocket −2.5 B
" −1.5 b

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1907phae.proj..584W

March 18, 1907.

Double Star No. 97 (Comstock's List) = 9 Sextantis

9	31	+5.3	Phot.	L. Obs. Bowie Rec
9	31			
0	0			

P.A. 290° Dist. 0.'9 ± Range 7.0 9.0

Index Left B.

67.5 Fol. x brighter dis.

9 49 50	116.0	48.5^	
	241.0	56.0^	
	297.0	104.5^	1.55^
	62.0		1.54^
	117.8	55.8^	
	244.3	49.3^	
	293.6	105.1^	1.53^

Index Right A.

	337.5		
	20.4	42.9^	
	151.9	56.6^	
	208.5	99.5^	1.67^
	331.1		1.58^
	28.5	57.4^	
	152.9	49.1^	
	202.0	106.5^	1.50^

9	59	32	
	108	82	^
9	54	41	^
5		-12	^
14	54	29	^

Mean 1.56^

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1907phas.proj..564W

March 18, 1907.

Double Star No. 115 (Comstock's List) = γ Virginis

12 34 −0.8 Phot. R H. Obs. Bowie Res

10 14

2 20 P.A. 180° Dist 4.2 = Mags 3.0 & 3.5

9 40

Index R & B

356.0 Northern & brighter dis

10 22 26

5.4	9.4^	
176.8	7.2^	
184.0	16.6	5.70^

357.7 5.66^

4.5 6.8^

175.9 10.3^

186.2 17.1^ 5.63^

Index L & A

265.5

275.2	9.7^	
88.0	5.6^	
93.6	15.3^	5.87^

267.1 5.86^

10 30 37

52 63^

10 26 32^

5 −12^

15 26 20^

273.9	6.8^	
86.0	8.6^	
94.6	15.4^	5.86^

Mean 5.76^

Last half of evening sky hazy

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1907phae.proj..584W

March 15, 1907.

with light cloud.

Hi's watch used for times tonight.
Watch 12 sec. fast.

7

7

7 5

12

76

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1907phag.proj..594W

March 20, 1907 (Wednesday)

R U Monocerotis Phot. 3 H. Obs. Bowie Rec.

6 50 −8.0
7 20
0 30

Index R & A

142.0 ← comp star dis.

7 33 26

219.9 77.9^
332.3 56.7^
29.0 134.6^ +0.88^ A

151.0 +0.86^
212.65 61.5^
322.8 75.8^
38.6 137.3^ +0.83^

Index L & B

51.5
135.3 83.8^
239.9 62.5^
302.4 146.3^ +0.65^ B

60.7 +0.68^
122.7 62.0^
229.4 81.1^
310.5 143.1^ +0.71^

7 51 30
84 56 ^
7 42 28 ^
5 −14 ^
12 42 14 ^

Mean +0.77^

7655.5293

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1907phae.proj..584W

March 20, 1907.

S. J. 8^h 7^m
H. b +1 16
Dec -7.2
P. A. 60.0 Var B
Sprocket -2.5 B
" -1.5 b

Double Star No. 45 (Comstock's List) = 1 Orionis
4 4 2 +6.7 Phot. R H. Obs. Bowie Rec
8 3 2
3 5 0

P. A. 135° Dist. 1.'7 ± Mags. 4.0 & 10.5

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1907phae.proj..584W

March 20, 1907.

Index Left B.

178.5 Northern & brighter dis.

δ 38 32

181.7 3.2^

357.5 3.7^

6.9^ 7.61^

1.5

177.9 7.69^

182.0 4.1^

358.7 2.3^

6.4^ 7.77^

1.0

Index Right A.

88.4

91.6 3.2^

268.0 3.7^

6.9^ 7.61^

271.7

89.2 7.70^

δ 49 45 91.5 2.3^

87 77^ 268.90 4.0^

δ 43 68^ 272.0 6.3^ 7.80^

5 -14^

13 43 54^ Mean 7.70^

Region somewhat low. Observations a little difficult but great care exercised and results considered good

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1907phae.proj..584W

March 20, 1907.

Double Star No. 76 (Comstock's List) = 29 Monocerotis A C

8	2	-2.6 Phot. R & Obs Bowie Ref
9	17	
1	15	

P. A 245 Dist. 1.2± Mags 5.7 & 9.0

Index Le A B.

	78.5	Fol, northern & brighter	
9 24 50	101.7	23.2"	
	263.5	12.4"	
	275.9	35.6"	4.03"
	84.1		4.08"
	96.1	12.0"	
	258.5	22.0"	
	280.5	34.0"	4.13"

Index R & S A.

	349.4		
	9.8	20.4"	
	173.9	11.1"	
	185.0	31.5"	4.30"
	354.0		4.35"
9 31 31	5.0	11.0"	
55 81 "	170.5	19.0"	
9 27 70 "	189.5	30.0"	4.40"
5 -14 "			
14 27 56			Mean 4.22"

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1907phae.proj..584W

March 20, 1907.

Double Star No. 95 (Comstock's List) = 6 Leonis

9 24 +10.4 Phot. R & Obs. Bowie Rec.

9 49

0 25 P.A. 75° Dist. 0.'6 Mags. 5.0 & ~~9.6~~

Index R + B A.

263.2 South. prec. a brighter dis

10 7 15 276.1 12.9^

80.8 18.6^

99.4 31.5^ 4.30^

259.9 4.24^

279.3 19.4^

82.9 14.0^

96.9 33.4^ 4.17^

Index Lech B.

174.0

186.5 12.5^

349.5 20.7^

10.2 33.2^ 4.18^

169.5 4.10^

10 16 8 189.5 20.0^

23 23 ^ 352.0 15.5^

10 11 42 ^ 7.5 35.5^ 4.03^

5 -14 ^

15 11 28 ^ Mean 4.17^

It's not to be used for times tonight

Hatch 14 sec. fasts.

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1907phae.proj..584W

March 21, 1907 (Thursday)

Double Star No. 96 (Comstock's List) = 7 Leonis

9 28 +15.0 Phot. R H. Obs. Lowe Rec

7 38

1 50

10 10 P.A. 75° Dist. 0.7 Mags. 5.8 10.0

Index L & B B.

166.0 Prec. & brighter dis

7 48 24 194.5 28.5^

347.4 23.1^

51.6^ 3.20^

10.5

168.5 3.30^

190.8 22.3^

346.7 24.9^

47.2^ 3.40^

11.6

Index R & A A.

77.5

102.5 25.0^

257.7 23.3^

48.3^ 3.35^

281.0

79.1 3.38^

7 56 18 101.4 22.3^

24.9^

257.5 47.2^ 3.40^

282.4

104 42

7 52 21

5 -6

12 52 15

Mean 3.34^

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1907phae.proj..584W

March 21, 1907.

Double Star No. 88 (Comstock's List) = θ Hydrae

9 7 +2.9 Phot W. Obs. Bowie Res

8 17

50

11 10 P.A. 175° Dist. 0.7 Mags. 4.0 11.0

Index

Cannot measured tonight. Companion invisible in photometer. The air is pretty steady and images pretty good. Moon past the quarter and not very near. It is doubtful if this star can be measured, even when there is no moonlight

Double Star No. 99 (Comstock's List) = γ Leonis A C

10 12 +20.5 Phot. R. H. Obs. Bowie Res

8 32

1 40

10 20 P.A. 290° Dist 4.2 ± Mags 3.0 + 10.2

Measurements on fol. page.

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1907phae.proj..584W

March 21, 1907.

Index Red A.

8 30 21

359.0 South fol. & brighter dbl
3.3 4.3^
179.6 2.5^
182.1 6.8^ 7.64^

359.3 7.81^
2.5 3.2^
179.3 2.6^
181.9 5.8^ 7.98^

9

Index Red B.

268.6
272.6 4.0^
89.0 3.0^
92.0 7.0^ 7.57^

268.5 7.57^
271.6 3.1^
88.45 3.9^
92.4 7.0^ 7.57^

Mean 7.69^

8	38	44
	68	65
6	34	32
5		−6
13	34	26

Observations somewhat dif on account of elongation of images, principaly of brighter star. The brighter star is a rather close double & combined light of both componets in bright star used in measurements

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1907phae.proj..584

March 21, 1907

Double Star No. 100 (Comstock's List) = Y Leonis AB
Phot. R. A. Obs. Lowell Rec.
P. A. 305° Dist. 5.5 ± Image 3.0 10.5

Index

~~90.2~~
89.3
9 1 10 90.7
89.52 72.0
89.7

Abandoned. Bright star does not properly dis. Owing to the fact that the two stars are about as far distant as the phot will grasp, also that the brighter component is a double, is perceptibly elongated, and also from the fact that the brighter component does not satisfactorily dis. It ~~is~~ seems quite certain that this pair cannot be measured at any time.

Double Star No. 101 (Comstock's List) = σ 362

10	16	+6.3
9	31	
	45	
11	15	

P. A. 350° Dist. 1.1 ± Image 6.0 & 10.5

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1907phae.proj..584W

March 21, 1907

Index R & B A.

258.2 ↙ Southern & brighter dia		
281.2	23.0"	
80.7	18.3"	
99.0	41.3"	3.70"
260.5		3.73"
278.9	18.4"	
78.7	21.8"	
100.5	40.2"	3.76"

Index Loch B.

168.0		
191.5	23.5"	
350.6	17.8"	
8.4	41.3"	3.70"
170.7		3.66"
189.0	18.3"	
348.0	24.3"	
12.3	42.6"	3.63"

Mean 3.70"

9	38	40
9	48	18
	86	58
9	43	29
5		-6
14	43	23

10

10

5

15

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1907phae.proj..584M

March 21, 1907.

Double Star No. 64 (Comstock's List) = 15 Lyncis
6 46 +58.6 Phot R H Obs Bowie Rec
10 11
3 25 P.A 165° Dist. 3.3 = Magn 5.0 10.5

Index Left B.

176.9 ← Northern & brighter dis
10 14 30 183.6 6.7^
356.9 6.8^
3.7 13.5^ 6.15^

176.2 6.20^
183.8 7.6^
357.5 5.3^
2.8 12.9^ 6.25^

Index Right A.

87.9
94.2 6.3^
267.1 7.0^
274.1 13.3^ 6.18^

86.8 6.16^
10 21 50 94.3 7.5^
267.5 6.0^
35 80 273.5 13.5^ 6.15^
10 -17 70
5 -6
15 18 4

Mean 6.18^

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1907phae.proj..584W

March 21, 1907.

S. & b. 1182			S. 394		
10	38	6.7	10	38	0.0
10	39	6.6	10	39	0.0
10	40	6.3	10	40	0.0
10	41	6.1	10	41	0.0

Last two comparisons considered the best.

H. accidently thought this was Mar. 22 (on which an eclipse occurs) and accordingly began to get ready for eclipse by taking the above chronometer comparisons. Found however that eclipse does not occur until tomorrow night

H's watch need for times tonight
Watch 6 sec fast

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1907phad.proj. .584W

March 25, 1907 (Monday)

Fourth Type Star +25°205

1	6	+23.8
7	41	
6	35	

Abandoned, too low.

Fourth Type Star +65°617 Phot. I H. Obs. Bowie Rec

10	35	+68.2
7	45	
2	50	
9	10	

Measurements on fol. page

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1907phae.proj..584W

March 25, 1907

Index Left

7 41 52	251.6 ← ~~4th type dis.~~		
	291.24	39.8^	B
	74.2	32.0^	
	106.2	71.8^	−2.45^
	256.5		−2.40^
	289.6	33.1^	
	68.6	41.9^	
	110.5	75.0^	−2.35^

Index Right

	159.1		
	201.9	42.8^	A
	348.0	29.2^	
	17.2	72.0^	−2.44^
	166.5		−2.48^
	194.0	27.5^	
	341.0	42.1^	
	23.1	69.6^	−2.52^

7	49	48
	90	100 ^
7	45	50 ^
5		−5 ^
12	45	45^

Means −2.44^

7660.5318

L.T. 8 23
L.A. −2 17
Dec. +67.2
C.A. 239.5 Ver B
Sprocket −2.5 B
" −1.5 b

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1907phaO.proj : 584W

March 25, 1907.

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

9	32	-0.5
8	32	
1	0	
11	0	

Index Rect

comp star to dia

155.1	334.9		
206.6	269.9	51.5^	A
339.7	160.3	41.3^	
21.0	210.8	92.8^	+1.84^

343.0		+1.86^
21.6	38.6^	
154.8	52.5^	
207.3	91.1^	+1.88^

Index L & B

244.4			
300.2	55.8^		B
69.0	43.7^		
112.7	99.5^	+1.67^	

251.9		+1.74^
292.0	40.1^	
64.4	53.6^	
118.0	93.7^	+1.82^

Mean +1.80^

8	42	48	
	97	56	^
8	48	59	^
5		-5	^
13	48	54	^

7660.5756

Observations difficult Bright moon rather near and field very bright. Firsts original setts especially dif until the eye became used to the very bright field This setts retaken

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1907phae.proj..584W

March 25, 1907.

S.T. 9^h 30^m
H.b. -0 16
Dec. -2.2
P.A. 210.5 Ser. ⊗
Sprocket -0.5 ⊗
" +0.5 b

Fourth Type Star +38 1539 Phot. J Ht. Obs Provi Roe

6	26	+38.6
9	56	
3	30	

9.5 inch cap used

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1907phao.proj..584W

March 25, 1907.

Index Lo A

341.6	4th type dis.	
23.3	41.7^	
164.4	31.8^	
196.2	73.5^	−2.39^

B

346.5		−2.40^
16.3	29.8^	
160.2	42.9^	
203.1	72.7^	−2.42^

Index R + B

249.3		
291.8	42.5^	
74.9	33.6^	
108.5	76.1^	−2.31^

A

254.0		−2.26^
288.1	34.1^	
69.0	45.0^	
114.0	79.1^	−2.22^

Mean −2.33^

9 50 25

Dec 9 57 30

107 55^

9 53 58^

5 −5^

14 53 53^

7660.6207

L. S. 10h 34m P. A. reads a little small but this is due to the fact that the prism carriage runs quite hard on the track causing a little strain in the latter. Region however thoroughly identified.

No. A. +4 2

Dec. +39.0

P. A. 191.0 Ver. B

Sprocket −3.5 B

" −2.5 b

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1907phae.proj..584W

March 25 1907

Fourth Type Star -13° 3407 Phot I & Obs Bow

11 31 -12.4
10 46
0 45
11 15

Index Left

40.2 ← Comp Star dia

10 41 28	138.8	98.6 ^
	233.0	81.2 ^
	314.2	179.8 ^ 0.00 ^

	50.9	+0.01 ^
	133.1	82.2 ^
	223.0	97.0 ^
	320.0	179.2 ^ +0.02 ^

Index Right

	309.8	
	52.1	102.3 ^
	137.5	88.0 ^
	225.5	190.3 ^
		169.7 ^ −0.20 ^

	222.3		
10 47 12	45.0	82.7	−0.12 ^
44 40 ^	131.2	99.2	
10 44 20 ^	230.4	181.9	
5 −5 ^		174.1	−0.03 ^
15 44 15 ^		Mean	−0.06 ^

7660.6557

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1907phaa.proj..584w

March 25, 1907

S. J. 11 15
H. A. -0 15
Dec. -14.4
P. A. 176.0 Sprocket b
Sprocket +0.5 B
" +1.5 b

H's watch used for times tonight.
Watch 5 sec. fast.

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1907phae.proj..584W

March 27, 1907. (Wednesday)

Double Star No 26 Comstock's List = Σ 296

2	35	+45.5
8	5	
5	30	

7 35 Troubled by clouds at the first and now heavy fog coming in.

7 55 0 Heavy fog has come in evidently ~~to stay~~ for evening. No chance for anything further.

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1907phao.proj..564W

March 29, 1907. (Friday)

Fourth Inferior Star +38° 2389

Abandoned. Clouds

Double Star No. 88 (Comstock's List) θ Hydrae

9	7	+2.8
8	0	
1	7	
10	53	

Abandoned. Clouds.

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1907phae.proj..584W

March 29, 1907.

Double Star No 90 (Comstock's List) 40 Lyncis AB

9	13	+34.5
8	3	
1	10	
10	50	

Abandoned. Too high and too much cloud

Double Star No. 110 (Comstock's List) β Virginis

11	43	+2.6
8	13	
3	30	
8	30	

Sky somewhat hazy and cloudy and moon bright but companion thought to be seen at rare intervals making allowance for somewhat unfavorable conditions it would seem that the companion must be fainter than 10th magn

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1907phao.proj..564W

March 29, 1907

Double Star No. 48 (Comstock's List) = Σ 634

5	4	+79.0 Phot. R. H. Obs. Bowie Rec
8	39	P. A. 25° Dist. 12" Mags. 4.3 & 7.7
+3	35	

More clouds again.

Index Right A.

348.4 Southern & brighter dis.

8 17 25	12.1	23.7^	
	167.6	23.4^	
	191.0	47.1^	3.40^
	347.7		3.36^
	10.2	22.5^	
	166.2	26.5^	
	192.7	49.0^	3.32^

Index Left B.

	256.9		
	281.5	24.6^	
	77.2	25.6^	
	102.8	50.2^	3.26^
	258.2		3.26^
	282.0	23.8^	
	76.8	26.4^	
	103.2	50.2^	3.26^

8	26	30	
	43	55^	
8	21	58^	
5		-4^	
13	21	54^	

Mean 3.31^

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1907phae.proj..584W

March 29, 1907.

Fourth Type Star +31° 1388 Phot. J. H. Obs. Bowie Rec

6 19 +30.6
9 29
3 10

Index L & B

	221.6	b comp. Star dis.
9 10 2	315.5	93.9^ B
	55.4	69.9^
	125.3	163.8^ +0.31^
	233.9	+0.29^
	306.6	72.7^
	44.9	92.8^
	137.7	165.5^ +0.27^

Index R & A

140.4	140.4	
223.6	223.3	83.2^ A
327.5	332.0	66.5^
34.0	28.8	149.7^ +0.58^
	146.3	+0.52^
9 17 0	212.0	65.7^
	316.0	90.0^
	46.0	155.7^ +0.46^

27 2^
9 13 31^
5 -4^
14 13 27^

Mean +0.40^

7664.59 27

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1907phao.proj..584

March 29, 1907.

S.J. 10^h 13^m
H.A. +3 35
Dec. +31.9
P.A. 288.8 Ser B
Sprocket −2.5 B
" −1.5 b

Observations in prec. group somewhat dif. on account of cloud and bad atmospheric conditions, as well as bright moonlight The most dif. was experienced in third original setto. This setto retaken

Double Star No. 95 (Comstock's List) = b Leonis

9	24	+10.3
10	34	
1	10	

P.A. 75° Dist 0.6 ± Mags. 5.1 10.0

Measurements on fol. page

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1907phae.proj..584W

March 29, 1907

Index R & B A.

258.5 Prec & brighter dis.

10 0 38

279.8 80.4'

84.1 21.9^

96.7 12.6^

34.5^ 4.10^

264.1 4.05^

276.7 12.6^

78.2 23.4^

36.0^ 4.00^

101.6

Index Lead B.

166.0

192.4 26.4^

353.2 14.0^

40.4^ 3.75^

7.2

173.5 3.54^

10 8 52 186.4 12.9^

8 90^ 346.4 24.4^

10 4 45^ 37.3^ 3.92^

5 -4^ 10.8

15 4 41^ Mean 3.94^

Observations in prec group rather dif. on account of bad atmospheric conditions and bright moonlight. This group 2/3 wt.

H's watch used for times tonight

Watch 4 sec. fast.

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1907phae.proj...584W

March 30, 1907 (Saturday)

Fourth Type Star +2° 1715 Phot. I Ht. Obs. Bowie Rec.

7 25 +2.2
8 5
40

Index Right

324.5	comp. Star dis.	
36.5	72.0^	
156.7	51.1^	
207.8	123.1^	+1.13^ A
335.7		+1.14^
27.0	51.3^	
146.0	70.9^	
216.9	122.2^	+1.14^

7 38 6

Index Left

232.4		
309.6	77.2^	
64.6	55.0^	B
119.6	132.2^	+0.93^
242.3		+0.92^
299.6	57.3^	
54.3	75.5^	
129.8	132.8^	+0.92^

Mean +1.03^

7	46	5	
	84	11	^
7	42	6	^
5		0	^
12	42	6	^

7665.5293

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1907phae.proj..584W

March 30, 1907.

S. J. 8h 40m
Hz. A. +1 5
Dec. +2.6
P. A. 24.9 Ver. S
Sprocket −1.5 S
" −0.5 b

Fourth Type Star +38°2389 Phot. J & Obs. Boric Rec

12	49	+39.1
8	49	
4	0	
8	0	

Color 3 but estimate of color rather dif on account of full moon

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1907phae.proj..584W

March 30, 1907

Index Red

147.3 ← 4th type dia.

δ 27 45	218.6	71.3^
	333.2	58.5^
	31.7	129.8^ −0.98^

A

	151.3	−0.98^
	210.0	58.7^
	326.3	70.6^
	36.9	129.3^ −0.99^

Index Yellow

B

	46.2	
	132.0	85.8^
	239.4	63.4^
	302.8	149.2^ −0.59^

	58.8	−0.64^
δ 37 55	123.4	64.6^
	231.4	79.4^
Red δ 32 50 ^	310.8	144.0 −0.69^
5 0 ^		Mean −0.81^
13 32 50		

S.J. 9h 33m

Ho A. −3 24

Red +37.4

P.A 203.5 Red δ

Sprocket −3.5 δ

" −2.5 b

r 7665.5645

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1907phae.proj..584W

March 30, 1907.

Fourth Type Star + 24°1686 Phot. J W. Obs. Bowie Rec.

7	36	+24.7
9	51	
2	15	

9 20 0 Sky pretty cloudy

9 52 0 Abandoned. Sky ~~too~~ cloudy

Double Star No. 49 (Comstock's List) = α Auriage

5	7	+45.9
10	42	
5	35	

10 5 0 Sky thickly cloudy. No chance for anything further

W's watch used for times
Watch 0

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1907phae.proj..584W

April 2, 1907 (Tuesday)

Asteroid Gerasa (488)

12	42	+14.9
8	22	
4	20	
7	40	

8.9
8.9
8.7
8.5
8.5

$7^h 56^m 0^s$ 8.6
8.5
8.5
8.5
8.6
8.5

16.0
16.0
$8^h 0^m 0^s$ 15.9

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1907phae.proj..584W

April 2, 1907.

16.0
16.2
15.8 16.0

30.1
30.5
30.4
$8^h\ 24^m\ 0^s$ 30.4
30.5
30.5
30.4 30.4

3.5
3.5
3.5
3.5
3.2
3.0
$8^h\ 43^m\ 0^s$ 3.3
3.5
3.6
3.1
3.3
3.3
3.5
3.2
3.6 3.4

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1907phae.proj..584

April 2 1907

	6.9	
	6.5	
	6.5	
	6.5	
$9^h\ 4^m\ 0^s$	6.4	
	6.5	
	6.5	
	6.5	
	6.2	
	6.5	6.5

	9.5	
	9.2	
	9.1	
	9.3	
$9^h\ 24^m\ 0^s$	9.2	
	9.4	
	9.0	
	9.2	
	9.2	9.2

A somewhat ~~systematic~~ search for asteroid was made but ~~asteroid~~ not certainly found, ~~although~~ transits of a number of stars near theoretical positions were taken. Towards

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1907phae.proj..584W

April 2, 1907.

the last of series of transits, it was noticed that there was a very faint star near theoretical position This star would seem to be 13.5 magn or fainter which is decidedly fainter than the magn. (10.9) given in Jahrbuch This object is too faint to be measured tonight. It is barely possible that this is the asteroid and that its faintness may be due to variability in light. Will defer anything further until another night.

Double star No. 90 (Burnham's List) = 40 Lyncis A B

9	13.	+35.0	Phot. R H. Obs Bruce Res
11	38		
2	25		

P. A 35 Dist. 3.5± Mags. 3.7 & 8.9

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1907phae.proj..584

April 2, 1907.

Index L+S B.

	265.2	South prec. & brighter dia.	
$10^h\ 50^m\ 40^s$	276.3	11.1"	
	86.4	7.2"	
	93.6	18.3"	5.48"
	266.0		5.46"
	275.1	9.1"	
	85.8	9.6"	
	95.4	18.7"	5.44"

Index Red 4.

	176.2		
	185.0	8.8"	
	356.8 7.3	7.0"	
	4.3	15.8"	5.80"
	176.7		5.77"
	184.3	7.6"	
	355.7	8.7"	
	4.4	16.3"	5.74"

10^h	58^m	25^s	
	108	65"	
10	54	32"	
5		0	
15	54	32"	

Mean 5.62"

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1907phae.proj..584W

April 2, 1907.

Double Star No. 91 (Comstock's List) Put B comp. with C
P. A. of B with reference to bright primary star = 32° Dist 3.'6 ± Magn. of
Index Right A. B 8.9 Magn of C 10.5

164.4 B dia.

11h 3m 2s

198.8	34.4^	
328.0	59.2^	
27.2	93.6^	1.82^

150.0		1.74^
209.8	59.8^	
339.9	40.1^	
20.0	99.9^	1.66^

Index Left B.

69.5

105.9	39.4^	
243.9	52.8^	
296.7	92.2^	1.86^

62.6		1.82^
117.9	55.3^	
249.2	40.3^	
289.5	95.6^	1.77^

Mean 1.78^

11h	13m	42s	
	16	44	^
11	8	22	^
5		0	^
16	8	22	

Companion C ~~is so close~~ being so close to B and also C being nearly two magns fainter than B together with ~~the~~ fact ~~that~~ B is somewhat bright, renders observations rather diff

It's watch used for times tonight
Hatch 0

7
7
7
5
12
76

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1907phao.proj..584

April 3, 1907 (Wednesday)

Z Persei Phot. J H. Obs. Bowie Rec.

2 33. +42.2
8 23
5 50

Index Cor.

56.6 ← comp. star dec.

7 42 10

127.3	70.7^
244.7	53.8^
298.5	124.5^ + 1.10^

B

60.9	+0.99^
118.9	58.0^
231.9	76.7^
308.6	134.7^ + 0.58^

Index Cor B

322.3	
37.8	75.5^
153.5	53.9^
207.4	129.4^ + 0.99^

A

333.9	+1.03^
27.9	54.0^
145.6	71.8^
217.4	125.8^ + 1.07^

Mean +1.01^

7 54 10
96 20 ^
7 48 10 ^
5 +7 ^
12 48 17 ^

7669.5335

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1907phae.proj..584W

April 3, 1907.

~~S. T.~~	9^h	13^m	Region somewhat low, some
~~R. A.~~	+6	35	haze, and some twilight;
~~Dec.~~	+42.0		observations rather dif.
~~P. A.~~	195.0	~~Ser.~~	It is not considered advis-
Sprocket	−2.5		able ~~to~~ take ~~a second~~ another group
"	−1.5		under ~~the~~ circumstances

R J Persei Phot. I H. Obs. Bowie Ser.

3	0	+44.3
9	25	
6	25	

8

8

5

13

76

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1907phas.proj..554

April 3, 1907

Index Left

	542	comp. Star dia:
8 38 30	127.5	73.3^
	244.9	53.1^
	298.0	126.4^ +1.05^
	60.5	+1.04^
	117.9	57.4^
	236.0	70.6^
	306.6	128.0^ +1.02^

Index Right

	327.7	
	37.3	69.6^
	149.6	60.4^
	210.0	130.0^ +0.98^
	333.4	+1.04^
	29.4	56.0^
	147.8	67.6^
	215.4	123.6^ +1.11^

Mean + 1.04^

8	50	38
	88	68 ^
8	44	34 ^
5		+7 ^
13	44	41

7669.5727

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1907phae.proj..584W

April 3, 1907

Index
147.9
9 16 30 215.4
335.1
Impossible to proceed satisfactorily
on account of low altitude and haze

S.T. 10h 30m
R.A. 7 12
Dec +46.6
P.A. 178.5 Dec
Sprocket −2.5
" −1.5

Double Star No. 73 (Comstock's List) = π Geminorum
7 39 +33.8
10 39
3 0
P.A. 330° Dist. 2.7 ±
Wrong abandoned

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1907phaO.proj:SSW

April 3, 1907.

Double Star No. 74 (Comstock's List) = π Geminorum
When principal star is put behind bar, a companion to primary is seen in about ~~the~~ P. A. indicated in list. It would seem to be closer to primary than 2". It is so close and faint, and primary is so bright that it can not be satisfactorily measured

Double Star No. 77 (Comstock's List) = Arg. 167 A B

8 2 +32.9

11 7

3 5

Phot R. H. Obs. Bowie Rec.

P. A. 75° Dist. 4.0 ± Mags 7.0 10.0

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1907phae.proj..584W

April 3, 1907

Index R + B A.

	258.0	Prec. & brighter dis.	
10 18 24	282.2	24.2″	
	83.0	17.1″	
	100.1	41.3″	3.70″
	262.0		3.74″
	279.5	17.5″	
	79.0	22.4″	
	101.4	39.9″	3.77″

Index L & A B.

I	168.4		
	192.8	24.4″	
	351.0	18.0″	
	9.0	42.4″	3.64″
	172.0		3.70″
	188.8	16.8″	
	348.8	23.2″	
	12.0	40.0″	3.77″

Mean 3.72″

10	25	0	
	43	24	″
10	21	42	″
5		+7	″
15	21	49	″

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1907phae.proj..56W

April 3 1907

Double Star No. 75 (Barnstocks List) = Mrg. 167 A C

P.d. 320 Dist. 0.'5 ± Mags. 7.0 + 11.5

Index R & B 1.

175.6 ← Southern & brighter dia.

10 29 20	185.5	9.9^	
	352.6	15.2^	
	7.8	25.1^	4.79^
	171.3		4.68^
	189.5	18.2^	
	355.0	9.7^	
	4.7	27.9^	4.56^

Index L & A B.

	84.5		
	95.3	10.8^	
	262.2	15.1^	
	277.3	25.9^	4.73^
	82.0		4.72^
10 37 28	96.5	14.5^	
66 48^	263.5	11.5^	
10 33 24^	275.0	26.0^	4.72^
5 +7^			
15 33 31^			Mean 4.70^

Measurements rather difficult on account of faintness of companion.

It's watch used for times
Watch 7 sec. slow.

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1907phae.proj..584w

April 6, 1907 (Saturday)

Asteroid Alkmene (488)

12 13 + 18.6

8. 38

3 35

8 25

Star A + B

15.2

15.4

15.5

8 5 0 15.4

15.5

15.5

15.5

15.5

15.6 15.5

Stars B + C

~~8.0~~

8.3

8.1

8.2

8 11 0 8.4

8.4

8.3

8.3

8.1

8.4

8.1 8.3

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1907phae.proj..584W

April 6, 1907

Stars A + B

17.0
17.1
17.1
17.4
8 50 0 17.2
17.4
17.4

Stars B + C

8.3
8.4
8 54 0 8.3
8.3
8.4

Star A turns out (as was expected) to be the asteroid

Comp. Star = + 18° 2580 (9.5)

At 8h 21m eastern time, the asteroid preceded the comp. star by 1m 20s and was 10.'0 south of it

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1907phae.proj..584W

April 6, 1907.

Index Above I

326.0 bomp. Star dis

9 15 34

36.2	70.2	A
154.5	54.5	
209.0	124.7	+1.09

330.6 +1.08

28.0	57.4
146.6	67.7
214.3	125.1 +1.08

Index Below

235.5

305.6	70.1
58.4	58.6
117.0	128.7 +1.00

245.4 +1.04

302.1	56.7
57.5	69.1
126.6	125.8 +1.07

Mean +1.06

9 25 6

43 40

9 21 50

5 +6

14 21 56

7672.5985

1907phac.proj..564W

April 6, 1907

Index Below II

23.5, 8

9 36 35

305.4	66.6^	B
61.5	60.3^	
121.8	126.9^	+1.04^

241.7 +0.97^

299.4	57.7^	
53.6	75.9^	
129.5	133.6^	+0.90^

Index Above

149.8

212.5	62.7^	A
336.0	53.4^	
29.4	116.1^	+1.28^

153.8 +1.20^

209.1	55.3^	
327.6	18.3^	
35.9	123.6^	+1.11^

Mean +1.08^

9 57 35

93	70	^
9 46	65	^
5	+6	
14 47	11	^

7672.6161

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1907phae.proj..584W

April 6, 1907.

Index Above

146.2		III
217.6	71.4	A
235.8	52.1	
~~28~~ 37.9	123.5	+1.12

153.0	+1.12
206.4	53.4
326.8	69.8
36.6	123.2 +1.12

Index Below

52.0		
131.0	79.0	B
242.2	60.8	
303.0	139.8 +0.78	

62.8	+0.82
121.5	58.7
235.0	76.5
311.5	135.2 +0.87

Mean +0.97

10	13	10
10	37	5
	50	15
10	25	8
5		+6
15	25	14

7672.6425

Stay hazy; observations difficult throughout. In last group and especially in last half of same observations more difficult, and uncertain on account of increasing haze. Last group 1/2 wts. Impossible to do anything further on asteroid

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1907phao.proj..564W

April 6, 1907.

S.T. $11^h\ 58^m$
H.A $-0\ 15$
Dec $+17.7$
Pol 71,0 for A
Sprocket -4.5 A
" -3.5 B
" -2.5 b

It's watch used for times tonight
Watch 6 sec slow

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1907phae.proj..584W

April 11, 1907 (Thursday)

Asteroid Klenaa (488)

12	13	+18.6
8	48	
3	25	
8	35	

Phot. I Hr. Obs Bowie Rec

24.2
24.4
24.2 24.3

Asteroid follows +18° 2ν74 (9ν) by 24.s3 and is 5.'7 north of it

Comp. Star for Asteroid = +18° 2ν73 (9ν)

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1907phao.proj..564W

April 11 1907

Index L & A

51.0 ← Comp. star dec.

132.91	81.1^	B
240.0	60.7^	
300.7	141.8^	+0.74^

58.4 +0.70^

122.0	63.6^	
229.8	81.4^	
311.2	145.0^	+0.67^

Index R & B

325.5		
34.8	69.3^	A
149.3	63.5^	
212.8	132.8^	+0.92^

331.1 +0.92^

28.5	57.4^	
141.9	75.2^	
217.1	132.6^	+0.92^

Mean +0.81^

A	23	50	
	37	45	
	60	95	^
8	30	48	^
5		+7	^
13	30	55	^

7677.5631

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1907phae.proj..584W

April 11, 1907

Index R + B

II

3 20.0		
31.0	71.0^	A
144.5	57.5^	
202.0	128.5^	+1.01^
327.5		1.00^
25.5	58.0^	
138.5	71.0^	
209.5	129.0^	+1.00^

Index L + A

226.8		
306.4	79.6^	B
51.5	61.9^	
113.4	141.5^	+0.74^
231.2		+0.66^
295.5	64.3^	
44.0	85.0^	
129.0	149.3^	+0.59^

Mean +0.63^

6 48 8

6 56 14

106 22 ^

6 53 11 ^

5 +7 ^

13 53 18 ^

7677.57887

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1907phae.proj..584W

April 11, 1907.

III

Index L & A

223.5
304.0 +0.5 v
54.8
112.5 ∓7.7 v
134.2 v +0.21 v

234.0 62.2 v +0.72 v
296.2
44.0 79.6 v
123.6 141.4 v +0.74 v

Index B & B

143.7 64.3 v
205.0
327.5 ∓6.4 v
24.2 121.1 v +1.17 v

148.0 ∓5.4 v
203.4 +1.10 v
318.7 72.3 v
31.0 127.7 v +1.03 v

Mean +0.94 v

9 12 30

9 25 57

37 87 "
9 18 74 "
5 +7 "
14 19 21

7677.5968

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1907phae.proj..584W

April 11, 1907

Index R & B IV

	139.5		
9 35 6	213.0	73.5^	A
	327.9	56.1^	
	24.0	129.6^	+0.99^
	147.3		+1.02^
	203.0	55.7^	
	318.5	71.0^	
	29.5	126.7^	+1.05^

Index L & A

	42.4		
	123.5	81.1^	B
	231.9	62.1^	
	294.0	143.2^	+0.71^
	54.1		+0.71^
	116.0	61.9^	
	223.0	81.5^	
	304.5	143.4^	+0.71^

Average +0.86^

9	51	45	
	86	51	^
9	43	26	^
5		+7	^
14	43	33	^

7677.6136

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1907phae.proj..584W

April 11, 1907.

Index L a A

V

47.0

10 3 50

125.4 78.4^

233.0 62.0^

295.0 140.4^ +0.77^

54.1 0.70^

116.5 62.4^

221.3 54.3^

30 ~~27~~ + 5.6 146.7^ +0.64^

Index Q a B

320.5

35.0 74.5^

145.2 57.8^

202.0 132.3^ +0.93^

325.0 +0.96^

10 19 18

23.8 55.8^

139.5 74.0^

21 ~~+8~~ 3.5 129.8^ +0.98^

22 68 ^

10 11 34 ^

5 +7 ^

15 11 41 ^

Mean +0.83^

7677.6331

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1907phae.proj..584W

April 11, 1907

Index Q × B VI

320.7
321.0 71.3 ✓
147.4 √4.6 ✓
202.0 12√.9 ✓ +1.07 ✓

326.7 √7.3 ✓ +1.00 ✓
24.0
137.8 7√.0 ✓
212.8 132.3 ✓ +0.93 ✓

Index L × A

222.6 ∠2.√ ✓
305.1
52.9 61.1 ✓
114.0 143.6 ✓ +0.70 ✓

234.9 √9.4 ✓ +0.76
294.3
45.0 74.6 ✓
122.6 134.0 ✓ +0.41 ✓
Mean +0.44 ✓

10 31 0 A 11

10 48 20

79 20 ^
10 39 40 ^
5 +7 ^
15 39 47

7677.6527

11 26 0

Asteroid now follows +14' 2√74 [9.5] by 18.4 hence this is the asteroid 7

1 11 5 16

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1907phae.proj..584W

April 11, 1907

Stopped to reverse telescope. Tried to pick up region with phot. on, but found it was quicker to take off plate. Index Rod VII

			222.5		
11	38	36	304.6	82.1^	
			52.0	61.6^	
			113.6	143.7^	+0.70^
			2322		+0.72^
			297.9	65.7^	
			46.5	76.5^	
			123.0	142.2^	+0.73^

Index L & B

			142.0		
			209.7	67.7^	
			328.0	55.0^	
			23.0	122.7^	+1.13^
			148.5		+1.08^
			203.4	54.9^	
			319.0	73.0^	
			32.0	127.9^	+1.02^

Mean +0.90^

11	48	10	
	86	46	^
11	43	23	^
5		+7	^
16	43	30	

7677.6968

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1907phae.proj..584W

April 11, 1907

Index L & S VIII

142.0		
212.7	70.7	B
324.0	55.0	
19.0	125.7	+1.07
147.1		+1.00
204.4	57.3	
317.5	75.1	
32.6	132.4	+0.93

Index R & A

45.0		A
119.7	74.7	
233.0	62.2	
295.2	136.9	+0.84
55.3		+0.78
113.4	58.1	
219.5	84.7	
304.2	142.8	+0.72

Mean +0.89

11	57	38	
12	8	48	
23	65	86	
11	62	73	
5		+7	
17	3	20	

7677.7106

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1907phae.proj..584W

April 11 1907

Index R & A

44.5 A IX

12 19 19

125.3	80.8 ^
231.3	66.5 ^
297.8	147.3 ^ +0.63 ^

53.0	+0.61 ^
117.8	64.8 ^
222.0	84.5 ^
306.5	149.3 ^ +0.59 ^

Index L & B

319.3	
33.9	74.6 ^
145.5	57.9 ^
203.4	132.5 ^ +0.93 ^

325.3	+0.86 ^
25.0	59.7 ^
133.5	80.0 ^
213.5	139.7 ^ 0.78 ^

12 32 10

51 29 ^

12 25 44 ^

5 +7 ^

17 25 51

Mean +0.74 ^

S. S. 14 18

7677.7263 H. A. +2 12

Dec. +18.6

It's watch used for times

P. A. 84.0 Var. B

Watch 7 sec. slow

Sprocket -6.5 A

" -5.5 B

" -5.0 6

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1907phae.proj..584W

April 11, 1907

Observations throughout evening somewhat difficult on account of faintness of asteroid as seen in phots., also from the fact that the sky was not perfectly clear, on account of glare of electric lights were more troublesome, and also from the fact that the emergent pencils gave some trouble. During observations the asteroid passed the meridian and the altitude was rather high.

Apr. 12. 1907.

Noticed, after leaving Observatory last night, that the sky was growing more hazy, especially west of meridian, and about region of asteroid. As the last group was difficult, this groups probably affected. Group ½ wt.

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1907phae.proj..584

April 12, 1907 (Friday)

Sky all cloudy first of evening. Clouds became thinner and some stars came out about 8.30

8
8 48 0 Sky all cloudy again

Double Star No 82 (Comstock's List) = Σ 1263

8	51	+42.4
11	11	
2	20	

Phot. R H Obs Lowell Ref.

P.A. 20° Dist. 1.1" ± Mags. 8.0 & 8.5

Measurements on fol. page

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1907phae.proj..584W

April 12, 1907

Index R & A

222.4 Northern and fainter dis.

9 48 55	319.6	97.2^	
	37.0	104.7^	
		201.9^	
	141.7	158.1^	0.42^
	214.9		
	322.0	107.1^	0.48^
	39.5	101.3^	
		208.4^	
	140.8	151.6^	0.54^

Index L & B

	127.0		
	228.2	101.2^	
	304.3	106.7^	
		207.9^	
	51.0	152.1^	0.53^
	130.2		0.50^
9 59 4	228.9	98.7^	
	307.0	105.4^	
		204.1^	
	52.4	155.9^	0.46^

	107	59^
9	53	60^
5		+8^
14	54	8^

Mean 0.49^

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1907phae.proj..584W

April 12, 1907.

Asteroid Klenia (488)

12	13	+18.6
11	48	
	25	
11	35	

3 - 20 = 17

57 - 15 - 18

37 - 55 - 18

9 - 26 - 17

39 - 56 - 17

10 26 Asteroid precedes +18° 2574 (9.5) by 17.^{s}4 and is 5.'2 north of it

Double Star No. 127 (Comstock's List) = σ Bootis A B

14	28	+30.4
12	18	
2	10	
9	50	

Abandoned

10 42 0 Sky becoming all cloudy again

Sky becoming cloudy everywhere. No chance for anything further. No watch used for times

Watch 8 sec. slow.

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1907phae.proj..584W

April 15, 1907 (Monday)

Asteroid Kremsa (488)

12	13	+18.6
8	58	
3	15	Phot. I St. Obs. Bonn Rev
8	45	Comp. Star = +18° 2574 (9.5)

7 33 0 Asteroid precedes +18° 2573 (9.5) by 12.8 sec. and is 4.0 north of it.

Index Corr. (B)

	308.2	Comp. Star dis.
8 9 52	21.8	73.6"
	139.1	50.7"
	189.8	124.3" +1.10"
	3220	+1.16"
	10.8	48.8"
	131.6	70.0"
	201.6	118.8" +1.22"

Index Corr. (A)

	226.6	
	281.4	54.8"
	37.8	75.1"
	112.9	129.9" +0.98"
	215.9	+0.94"
	294.5	78.6"
	47.1	55.5"
	102.6	134.1" +0.89"

Mean +1.05"

8	23	5
	32	57 "
8	16	28 "
5		+12 "
13	16	40 "

7681.5533

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1907phae.proj..584W

April 15, 1907

Index R & B

II

227.5

6 29 0

281.1 53.6^

37.5 74.2^

111.7 127.8^ +1.03^

A

220.0 +0.97^

294.2 74.2^

45.6 59.2^

104.6 133.4^ +0.91^

Index L & A

128.0

202.0 74.0^

320.5 53.9^

14.4 127.9^ +1.02^

B

138.1 +1.04^

191.5 53.4^

308.8 72.6^

21.4 126.0^ +1.06^

Mean +1.00^

8 40 16

69 16 ^

8 34 38 ^

5 +12 ^

13 34 50 ^

7681 - 5659

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1907phae.proj..584W

April 15, 1907

Index L & A III

128.7
198.0 69.3^ B
319.0 53.0^
12.0 122.3^ +1.14^

139.0 +1.16^
191.6 52.6^
311.0 68.3^
19.3 120.9^ +1.17^

Index R & B

38.3
109.3 71.0^ A
228.0 56.1^
284.1 127.1^ +1.04^

46.1 +1.02^
104.2 58.1^
219.0 71.0^
290.0 129.1^ +1.00^

Mean +1.09^

6 53 15

9 5 10

17 58 25^
8 59 12^
5 +12^
13 59 24^

7681.5829

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1907phae.proj..584W

April 15, 1907

Index R & B IV

	38.7	
9 14 58	114.5	75.8^
	228.5	55.7^
	284.2	131.5^ +0.95^
	49.1	+0.98^
	103.8	54.7^
	218.0	74.2^
	292.2	128.9^ +1.00^

Index L & A

	310.8	
	18.6	67.8^
	139.5	52.5^
	192.0	120.3^ +1.19^
	319.0	+1.15^
	10.0	51.0^
	129.0	73.0^
	202.0	124.0^ +1.11^

Mean +1.06^

9	28	20
	42	78^
9	21	39^
5		+12^
14	21	51^

7681.5985

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1907phae.proj..584W

April 15 1907

Index L & A

V

305.5

9 39 50

19.5 — 71.0^ — B

140.6 — 50.5^

191.1 — 121.5^ +1.16^

319.4 — +1.15^

8.7 — 49.3^

128.2 — 72.9^

201.1 — 122.2^ +1.14^

Index R & B

216.2

293.8 — 77.6^ — A

46.0 — 56.0^

102.0 — 133.6^ +0.90^

229.8 — +0.92^

9 52 42

284.2 — 54.4^

38.1 — 77.0^

115.1 — 131.4^ +0.95^

91 92^

9 45 76^

5 +12^

14 46 28^

Mean +1.04^

7681.6156

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1907phae.proj..5844

April 15, 1907

Index R & B

VI

214.6

10 2 17

294.5 79.9^ A

44.3 59.7^

104.0 139.6^ +0.78^

224.0 +0.79^

282.5 58.5^

34.8 80.4^

115.2 138.9^ +0.80^

Index L & A

128.0

199.0 71.0^ B

316.5 53.0^

9.5 124.0^ +1.11^

137.0 +1.10^

10 18 23

194.5 57.5^

311.4 67.6^

19.0 125.1^ +1.08^

20 40 ^

10 10 20 ^

5 +12 ^

15 10 32 ^

Mean +0.94^

7681.6322

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1907phae.proj..584W

April 15, 1907.

Index L & A

VII

129.6

10 28 50

200.1 70.5^ B

318.5 53.4^

11.9 123.9^ +1.11^

+1.06^

136.5

192.5 56.0^

307.3 72.2^

19.5 128.2^ +1.02^

Index R & B

35.2

116.8 81.6^

223.0 63.0^ A

256.0 144.6^ +0.68^

+0.74^

43.0

10 41 8 106.8 63.8^

69 58^ 219.5 75.5^

10 34 59^ 295.0 139.3^ +0.79^

5 +12^

15 35 11^ Mean +0.90^

Reversed telescope

7681.6494

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1907phae.proj..584W

April 15, 1907

10 52 0 Asteroid now precedes +18° 2573 (9.5) by 18.0 sec. VIII
hence the object assumed for asteroid, is asteroid

Index Rx A

	132.8	A
11 6 54	200.0	67.2^
	315.6	56.0^
	11.6	123.2^ +1.12^
	139.3	+1.09^
	194.5	55.2^
	305.9	70.9^
	19.5	126.1^ +1.06^

Index Lx B

	215.2	
	293.1	77.9^ B
	46.5	56.3^
	103.1	134.2^ +0.89^
	224.7	+0.80^
11 20 41	285.5	60.8^
26 95 ^	32.4	52.0^
11 13 48 ^	114.4	142.8^ +0.72^
5 +12 ^		
16 14 0 ^		Mean +0.94^

7681.6764

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1907phae.proj..584W

April 15, 1907.

Index L & B

IX

219.2

B

11 35 25

~~290.4~~ 89.4 70.2^

42.2 61.3^

103.5 131.5^ +0.95^

224.9 +0.88^

283.5 58.6^

36.5 79.2^

115.7 137.8^ +0.82^

Index R & A

132.5

A

199.3 66.8^

318.2 51.5^

9.7 118.3^ +1.23^

139.9 +1.22^

190.2 50.3^

310.2 69.5^

19.7 119.8^ +1.20^

Mean +1.05^

11 49 45

84 70^

11 42 35^

5 +12^

16 42 47^

7651.6964

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1907phae.proj..504W

April 15, 1907

Index Rod

	134.2	
12 4 14	198.0	63.8^
	319.0	51.0^
	10,0	114.8^ +1.31^
	142.0	+1.33^
	185.2	43.2^
	311.0	69.6^
	20,6	112.8^ +1.35^

~~Index L+R~~

	36.0	
	113.5	77.5^
	227.0	53.2^
	280.2	130.7^ +0.96^
	44.7	+0.84^
	101.8	57.1^
	215.0	44.9^
	297.9	142.0^ +0.73^

Mean +1.08^

12	19	38
	23	52 ^
12	11	56 ^
5		+12 ^
17	12	8 ^

76.8 1.7168

L. J. 14h 24m
H. A. +2 17
Dec. +18.6
P.A. 101.5 Dec.
Sprocket −6.5
∴ −5.5

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1907phae.proj..584W

April 15, 1907.

Measurements somewhat difficult throughout on account of faintness of asteroid and some haze in sky. Measurements most difficult as asteroid got near meridian, since the altitude was rather high and observer was most constrained in position. Seventh group rather the most difficult of all but the greatest possible care exercised throughout and observations considered pretty satisfactory.

It's watch used for times tonight. Watch 1 2 sec. slow.

7

8
15
7
5
12
76

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1907phae.proj.584w

April 16, 1907 (Tuesday)

Barr's Supp. Var. = +37° 811 (5.7) Phot J. K. Oke Bowl. 7 inch cap used.

3	35	+37.3
9	15	
5	40	

Comp. Star = +37° 814 (7.5)

Index Red

49.2 Supp. Var. dis.

97.9	48.7^	
237.0	35.9^	A
272.9	84.6^	-2.06^

7 49 40

56.2		-2.07^
91.9	35.7^	
230.6	48.4^	
279.0	84.1^	-2.08^

Index Left

321.2		
7.6	46.4^	
146.0	34.6^	B
180.6	81.0^	-2.17^

327.4		-2.24^
1.2	33.5^	
143.0	42.1^	
184.8 5.1	75.9^	-2.32^

Mean -2.16^

8 1 54

15	50	94^
7	55	47^
5		+12^
12	55	59^

7682.5389

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1907phae.proj..584W

April 16, 1907

II

Index L & B

321.3			
5.7	44.4^		B
146.5	35.0^		
151.5	79.4^	-2.21^	
327.0		-2.22^	
1.8	34.8^		
142.8	44.2^		
187.0	79.0^	-2.22^	

Index R & A

231.5			
277.5	46.0^		A
55.0	36.2^		
91.2	82.2^	-2.13^	
236.4		-2.08^	
271.3	34.9^		
48.5	50.8^		
99.3	85.7^	-2.03^	

Mean -2.15^

8 7 5

8 16 45

23 50 ^

8 11 55 ^

5 +12 ^

13 12 7 ^

7682.55 01

1907phae.proj..584W

April 16, 1907.

Index R.A. III

229.3
δ 20 46 276.0
55.5
92.0

235.4
Clouds
Stopped by clouds

S.T. 10h 20m
H.A. 6 44
Dec. +37.5
P.A. 266.0 Ker B
Sprocket +0.5 A
" +1.5 B
" +2.1 b

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1907phae.proj..584W

April 16, 1907.

Asteroid ~~Klemsa~~ (488)

12	13	+18.6
10	58	
1	15	
10	45	

9 18 0 Asteroid precedes +18° 2573 (9.5) by 48 sec. and is some 3' north of it. The transit was ~~taken~~ through more or less cloud and immediately thereafter it became so thickly cloudy that an accurate difference in declination could not be obtained. The transit interval considered pretty good

9 28 0 ~~Sky~~ now thickly cloudy everywhere, storm coming ~~too~~ chance for anything further.

It's watch used for times tonight.
Watch 12 sec. slow

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1907phae.proj..584W

April 17, 1907 (Wednesday)

S. & b. 1182 — B 394

7 8 0.0

1 11 23.5 — 7 9 0.0

Reapr. Jupr. II Phot. R. H. Obs. Bowie Rec. bomp. with more distant of two Sats. on prec. side = Sat. I

7 26 0 blouds

7	31	58	1	34	21		False alarm
					54		"
				35	23		"
7	33	33^		"	56		Susp.
7	33	51^		36	14		Seen
7	34	4^		"	27	+2.5^ 35.7^	163.5
	34	23^		"	46	+2.0^ 44.0^	199.2
	34	41^		37	4	+1.5^ 53.1^	155.2
	34	57^		"	20	+1.2^ 60.5^	208.3
	35	13^		"	36	+1.1^ 62.8^	147.8
	35	30^		"	53	+1.0^ 65.1^	210.6
7	35	42^		38	5	+0.8^ 70.4^	147.0 5.5

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1907phae.proj..584W

April 17, 1907.

7	35	57						
	36	12						
	36	24						
	36	36						
	36	50						
	37	3						
	37	16						
1	40	17						
5	+57	+37						
7	37	54						
1	41	6						
5	+57	+37						
7	38	43						
1	42	5						
5	57	37						
7	39	42						
1	42	56						
5	+57	+37						
7	40	33						
1	43	49						
5	+57	+37						
7	41	26						

38	20	+0.6	73.4	215.9	
	35	+0.6	74.0	142.5	
	47	+0.5	76.5	216.5	
	59	+0.4	80.1	140.0	
39	13	+0.3	80.9	220.1	
	26	+0.3	81.8	139.2	
	39			221.0	
	57		85.4	137.5	
40	11		85.6	222.9	
			171.0		
	25	+0.2	85.5	136.4	
	36			222.0	
	49		86.1	137.0	
	59		86.4	223.1	
41	12		172.5	137.1	
	24	+0.1	86.2	223.5	
	37		86.0	136.0	
42	1		87.6	222.0	
	15		173.6	135.9	
	27	+0.1	86.8	223.5	
	39		86.1	136.9	
	49		86.5	223.0	
43	2		172.6		
	13	+0.1	86.3	137.0	
				223.5	
	27		85.8	137.0	
	42		87.3	222.8	
	54		173.1	136.0	
44	12	+0.1	86.6	223.3	

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1907phae.proj..584

April 17, 1907.

1	44	48^	44	24	87.9^ 136.1	
5	+57	+37^		41	89.0^ 224.0	6
7	42	25^		56	176.9^	
					+0.1^ 88.4^ 136.0	
			45	10	225.0	
				24	86.4^ 137.1	
1	45	43^		36	86.0^ 223.5	7
5	+57	+37^		48	172.4^	
7	43	20^			+0.1^ 86.2^ 137.5	
			46	5	223.5	
				20	86.7^ 136.1	
1	47	2^		28	86.8^ 222.8	
5	+57	+37^	47	33	173.5^	8
7	44	39^			+0.1^ 86.8^ 135.0	
				45	221.8	
			Limits of Vis.			
1	48	54^	48	31	165.5	
5	+57	+37^	"	46	29.3^ 194.8	
7	46	31^	49	1	27.5^	
					56.8^ 166.5	
			"	17	+3.0^ 28.4^ 194.0	

S. & b. 1182

1	52	23.0
1	53	22.9

B. 394

7	50	0.0
7	51	0.0

Seeing pretty good. Observations

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1907phae.proj..584W

April 17, 1907

made during eclipse also considered pretty good. Sat. reap. a little farther from limb of Jup. than was indicated by the almanac and was also quite close to a ghost of Jup. in phot. H. is of the opinion that the time given when first susp. is consequently a very little late.

∴ In previous eclipse

Add $5^h\ 57^m\ 37^s.0$ throughout.

Barr's Susp. Var = + 37° 811 (5.7)

3	35	+37.3	Phot. 3 H. Obs. Bowie Rec
9	55		7 inch cap used
6	20		

Measurements on fol. pages.

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1907phae.proj..584W

April 17, 1907.

Index R & A

	47.7 ← Unsp. Var. dis.	
8 5 25	99.5	51.8^
	238.6	32.9^
	clouds 271.5	84.7^ -2.06^

I

A

	56.9	-2.08^
	91.1	34.2^
	230.2	48.6^
	278.8	82.8^ -2.11^

Index L & B

	321.8	
	7.2	45.4^
	148.0	31.8^
	179.8	77.2^ -2.28^

B

	329.2	-2.24^
	1.4	32.2^
	141.0	48.0^
	189.0	80.2^ -2.19^

Mean -2.16^

8	17	18	
	22	43	^
8	11	22	^
5		+10	^
13	11	32	

7683.5496

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1907phae.proj..584W

April 17, 1907.

Index L & B

320.3

~~1010~~ 9.9

149.2

180.2

329.3

1.2

141.9

187.3

Index R & A

231.8

280.5

56.9

90.7

238.0

270.9

49.5

99.6

II

B

49.6^
31.0^
80.6^ −2.18^

−2.23^

31.9^
45.4^
77.3^ −2.28^

A

48.7^
33.8^
82.5^ −2.12^

−2.12^

32.9^
50.1^
83.0^ −2.11^

Mean −2.18^

8 20 8

8 28 52

48 60 ^
8 24 30 ^
5 +10 ^
13 24 40 ^

7683.5588

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1907phae.proj..584W

April 17, 1907.

Index R & A III

230.8
279.4 48.6^
57.9 33.3^
91.2 81.9^ -2.14^

237.8 -2.11^.
273.3 35.5^
49.8 48.4^
98.2 83.9 -2.08^

Index L & B
140.6
186.5 45.9^
327.0 34.4^
1.4 80.3^ -2.19^

149.6 -2.24^
181.8 32.2^
3220 44.3^
~~5.5~~ 6.3 76.5^ -2.30^

Mean -2.18^

3350

440

77 50^
38 55^
+10^
13 39 5^

1683.5689

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1907phae.proj..584W

April 17, 1907

Index L & B

B

IV

8 49 33

140.5		
186.5	46.0^	
327.5	33.5^	
1.0	79.5^	−2.21^
148.8		−2.26
181.4	32.6^	
322.0	43.8^	
5.8	76.4^	−2.30^

Index R & A

50.8		
98.2	47.4^	A
238.0	33.5^	
271.5	80.9^	−2.17^
56.7		−2.14^
91.8	35.1^	
230.4	45.1^	
278.5	83.2	−2.10^

Mean −2.20

9 0 46

17	49	79	^
8	54	70	^
5		+10	^
13	55	20	^

S. T. 11h 10m

R. A +7 32

7683.5801 Dec +37.5

P. A 265.5 for B

Sprocket +0.5 A

" +1.5 B

" +2.0 b

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April 17, 1907

Asteroid Ursula (488) H. Obs. Bowie Sec.

12	13	+18. 6
11	43	
	30	
11	30	

a	31	
b	42	11
c	82	1m 22s

a	26	
b	37	11
c	62	1m 22s

Star b is undoubtedly the asteroid. Star a precedes +18°2573(9.5) by 1m 33s and is 0.'3 north of it. Star b precedes +18°2573(9.5) by 1m 22s and is 1.'6 north of it

1comp. Star = +18° 2573 (9.5)

Measurements on fol. page.

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1907phae.proj..584W

April 12, 1907

Index Above

	128.9	Comp. Star dis.
10 28 0	200.0	71.1^
	318.0	52.7^
	10.7	123.8^ +1.11^
	135.6	+1.06^
	193.7	58.1^
	311.0	71.0^
	22.0	129.1^ +1.00^

Index Below

	33.0	
	111.3	78.3^
	224.3	55.6^
	279.9	133.9^ +0.90^
	46.3	+0.88^
9 10 43 48	103.9	57.6^
1 71 48^	215.6	78.5^
9 10 35 54^	294.1	136.1^ +0.85^
.5 +10^		
115 36 4^		Mean +0.97^

7683.6501

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1907phae.proj..584W

April 17, 1907

Index Below

II

35.1

B

11 0 36

110.8 75.7^

225.2 55.5^

280.7 131.2^ +0.95^

45.4 +0.87^

105.7 60.3^

215.7 78.9^

294.6 139.2^ +0.79^

Index Above

306.0

A

19.3 73.3^

135.3 58.5^

193.8 131.8^ +0.94^

317.7

12.8 55.1^ +0.97^

125.6 73.7^

199.8 3 128.8^ +1.00^

11 15 5

15 41 ^

11 7 50 ^

5 +10 ^

16 8 0 ^

Mean +0.92^

S.J. 13h 19m

R.A. +1 15

7683.6722 Log. +18.5

It's a watch used for times

Watch 10 sec. slow.

C.A. 276.3 Var. B

Sprocket -3.5 A

" -2.5 B

" -2.0 b

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1907phae.proj..584W

April 18, 1907 (Thursday)

Asteroid Ursula (462) H. Obs. Bonn Rec

12 13 +18.6
9 53
2 20
9 40

8

8 2 2
2 24 1.35
3 59 1 57

8 5 6
5 22 1 34
6 56 1 50

39 55 16

8 14 14
30 1 35
16 5 1 51

8 14 0 Asteroid precedes +18° 2573 (9.5) by 1m. 50 sec and 0.9 south of it.

9
17
8
5
13

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1907phae.proj..584W

April 18, 1907

+18° 2$\overset{5}{}$73 (9.5) compared with +18° 2$\overset{5}{}$74 (9.5) Phot. J. M. Otte Levin Rec

Index L & A

115.8 ← +18° 2$\overset{5}{}$74 dis.

8 47 15

212.4	96.6″	B
302.0	78.5″	
20.5	175.1″	+0.09″

126.0 ~~27.4~~ +0.12″

199.5	73.5″	
293.3	97.9″	
31.2	171.4″	+0.16″

~~Index~~ R & D

21.3

125.3	104.0″	A
214.2	79.5″	
293.7	183.5″	
	176.5″	−0.06″

32.6

116.7	84.1″	−0.08″
202.6	101.4″	
304.0	185.5″	
	174.5″	−0.10″

Mean +0.02″

9	5	51	
17	52	66	″
8	56	33	″
5		+12	″
13	56	45	″

Therefore +18° 2$\overset{5}{}$73 is 0.02 fainter than 18° 2$\overset{5}{}$74

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1907phae.proj..584W

April 18, 1907

Same again

Index Above

	116.2	+15°2$\overset{5}{3}$74 dis.
9 35 36	211.4	95.2^
	304.6	79.0^
	23.6	174.2^ +0.11^
	131.8	+0.16^
	202.6	70.8^
	294.6	98.7^
	33.3	169.5^ +0.20^

Index Below

	23.0	
	125.0	102.0^
	213.0	80.2^
	293.2	182.2^
		177.8^ −0.04^
	32.9	
9 46 0	113.0	80.1^ −0.05^
81 36^	201.1	103.4^
9 40 48^	304.5	183.5^
5 +12^		176.5^ −0.06^
14 41 0		Mean +0.06^

Therefore +15°2$\overset{5}{3}$73 is 0.06 fainter than +15°2$\overset{5}{3}$74.

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1907phae.proj..584W

April 18, 1907.

S.J. 11h 50m
R.A. −0 15
Dec. +17.5
P.A. 94.0 Ver-A
Sprocket −4.5 B
" −3.5 b

Double Star No. 79 (Comstock's List) = Sr. 1169

8	6	+60.0
12	16	
4	10	

Phot. R. H. Obs. Bowie Rec.

P.A. 5° Dist. 1.'6 ± Mags. 6.1 & 9.4

Measurements on fol. page.

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1907phae.proj..584W

April 18, 1907.

Index Right A.

	341.6	Southern & brighter dis	
10 27 8	19.8	38.2^	
	167.6	25.3^	
	63.5^		2.73^
	192.9		
	345.7		2.65^
	14.2	28.5^	
	159.0	39.6^	
	68.1^		2.57^
	198.6		

Index Left B.

	251.2		
	288.2	37.0^	
	77.0	24.8^	
	61.8^		2.79^
	101.8		
	256.7		2.78^
	282.4	25.7^	
	70.7	37.1^	
	62.8^		2.76^
	107.8		

10	33	21	
	60	29	^
10	30	14	^
5		+12	^
15	30	26	^

Mean 2.72^

It's watch used for times tonight
Watch 12 sec slow

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1907phae.proj..584W

April 19, 1907 (Friday)

Double Star No. 88 (Comstock's List) = θ Hydrae

9	7	+2.9
10	57	
1	50	

Companion faint and only seen by glimpses cannot be measured tonight. Sky hazy.

Double Star No. 89 (Comstock's List) σ 331

9	8	+24.0 Phot. R. H. Obs. Bowie Exp.
11	8	
2	0	

P.A. 80 Dist. 1.1″ ± Mags. 8.0 . 9.1

Measurements on fol. page.

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1907phae.proj..584W

April 19, 1907

Index R. & D.

	236.6	Prec. c brighter dia	
9 12 35	302.2	65.6^	
	67.3	43.7^	
	111.0	109.3^	1.43^
	247.2		1.42^
	292.0	44.8^	
	58.0	65.0^	
	123.0	109.8^	1.42^

Index East B.

	145.5		
	214.6	69.1^	
	339.9	40.4^	
	20.3	109.5^	1.43^
	157.8		1.35^
9 18 55	202.3	44.5^	
30 90^	322.0	72.0^	
9 15 45^	34.0	116.5^	1.27^
5 +14^			
14 15 59^			

Mean 1.38^

9

9
5
14

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1907phae.proj..584W

April 19, 1907

Double Star No. 110 (Comstock's List) = β Virginis

11 4 8 +2.5 Phot. R. H. Obs. Bowie Rec.
11 3 3
1 0
11 5 0 P.A. 285° Dist. 4.0± Imags 4.0 10.5

Index Right A.

178.6 Fol. & brighter dis.
9 31 13 182.4 3.8^
0.0 1.7^
1.7 5.5^ 8.10^

178.5 7.74^
182.6 4.1^
3 5 9.4 8.8 3.6^
2.4 7.7^ 7.37^

Index Left B.

89.9
91.5 1.6^
269.0 3.0^
272.0 4.6^ 8.49^

88.7 8.06^
9 39 42 91.9 3.2^
268.6 3.6^
272.2 6.8^ 7.64^

7 0 55 ^
9 35 28 ^
5 +14 ^
14 35 42 ^

Mean 7.90^

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1907phae.proj..584W

April 19, 1907

Double Star 117 (Comstock's List) = 33 Virginis

12 39 +10.4 Phot. R Ht. Obs. Bowie Pos

11 49

50

11 10 P.A. 190° Dist. 2.5 ± Image. 5.5 8.0

Index Below B.

339.0 ~~North~~ brighter dis.

9 50 36 19.7 40.7^ 7

170.2 21.0^

191.2 61.7^ 2.80^

350.0 2.80^

11.5 21.5^

159.2 39.7^

199.0 61.2^ 2.81^

Index Above A.

249.0

290.6 41.6^

79.6 21.6^

101.2 63.2^ 2.74^

258.6 2.72^

9 57 12 242.3 23.7^

107 48^ 70.4 40.9^

9 53 54^ 111.3 64.6^ 2.69^

5 +14^

14 54 8^

Mean 2.76^

It is ~~a match~~ used for times tonight

~~Match~~ 14 sec. slow

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1907phae.proj..584W

April 20, 1907 (Saturday)

+18° 2573 (9.5) compared with +18° 2574 (9.5) (b. & Theresa)

Phot. I ☆. Obs. Bowie Sec.

12	13	+18.6
9	13	
3	0	
9	0	

Index Card

294.6 ← +18° 2574 dis

32.8	98.2″	
127.2	79.6″	
206.8	177.8″	+0.04″

B

307.3

220 +0.10″

292.2

30.8	98.6″	
126.6	73.5″	
200.1	172.1″	+0.15″

Index R + B

203.5		
303.7	100.2″	
31.8	80.1″	
111.9	180.3″	
	179.7″	−0.01″

A

213.3

291.4	78.1″	−0.01″
22.0	102.2″	
124.2	180.3″	
	179.7″	−0.01″

Mean +0.04″

7 40 56

7 56 45

96 101″

7 49 50″

5 +16″

12 49 6″

7686.5341

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1907phae.proj..584W

April 20, 1907

S.T. 10^h 17^m
R.A. −1 49
Dec. +17.6
P.A. 94.9 Ver. A
Sprocket: −4.58
" −3.86

Double Star Nr. 57 (Comstock's List) + Auriage

5	51	+37.2
10	39	
4	48	

Principal component ~~too~~ bright, faint component ~~too~~ faint and ~~too~~ near bright component to be measured satisfactorily

9
17
8
5
13

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1907phae..proj..584W

April 20, 1907.

Double Star No. 61 (Comstock's List) = 8 Lyncis

6 26 +61.6 Phot. R. H. Obs. Bowie Rec.

10 51

4 25

P.A. 95° Dist. 6.0± Images 6.0 6.9

Index Above A.

149.5 Rec. & brighter dis.

8 53 33	217.9	68.4^		
	337.1	48.1^		
	25.2	116.5^	1.27^	
	158.2		1.25^	
	207.5	49.3^		
	325.6	69.2^		
	34.8	118.5	1.23^	

Index Below B.

57.9			
124.8	66.9^		
238.0	61.0^		
299.0	127.9^	1.02^	
61.0		0.94^	
124.9	63.9^		
236.6	71.5^		
308.1	135.4^	0.87^	

9	1	48	
17	54	81	^
8	57	40	^
5		+16	^
13	57	56	^

Owing to distances of components in above (although nearly so) group, images do not quite previerse over each other when prisms are away up the tube. This together with slight elongation of images make observations a little dif. to romp however considered pretty good.

Mean 1.10^

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1907phae.proj..584W

April 20, 1907.

Double Star No. 80 (Comstock's List) = Lamelop 176

8 7 +72.9 Phot. R. H. Obs. Bowie Rec

11. 27

3 20

P. A. 85° Dist. 0.7 ± Mags. 6.0 & 10.2

Index Below B.

256.5 Prec. brighter dis.

9 24 45

283.97 27.2^

79.7 20.1^

99.8 47.3^ 3.40^

259.3 3.44^

280.0 20.7^

77.9 25.1^

103.0 45.8^ 3.47^

Index Above A.

167.0

193.0 26.0^

350.3 19.2^

9.5 45.2^ 3.50^

170.5 3.44^

9 32 30 190.4 19.9^

56 75^ 345.5 27.5^

9 28 38^ 13.0 47.4^ 3.39^

5 +16^

14 28 54^

Mean 3.44^

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1907phae.proj..584W

April 20, 1907

Double Star No. 88 (Comstock's List) = ϕ Hydrae

9	7	+2.9
11	52	
2	45	

∴ Abandoned. Moon ~~too~~ bright and companion ~~too~~ faint and ~~too~~ near primary.

Double Star No. 93 (Comstock's List) = 41 Lyncis AC

9	20	+46.2 Phot. R H. Obs Bonne Rec
11	58	
2	38	

P. A. 80° Dists. 1.4 ± Imags. 6.0 10.2

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1907phae.proj..584W

April 20, 1907

Index Above A.

173.8	Prec & brighter dia	
186.3	12.5^	
355.8	7.9^	
3.7	20.4^	5.25^
176.0		5.28^
184.5	8.5^	
354.4	11.2^	
5.6	19.7^	5.32^

Index Below B.

83.7		
95.6	11.9^	
265.8	8.6^	
274.4	20.5^	5.24^
85.1		5.16^
93.9	8.8^	
263.3	13.3^	
276.6	22.1^	5.07^

Mean 5.22^

9 57 48

10 5 45

19 62 93^
9 61 46^
5 +16^
15 2 2^

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1907phae.proj..584W

April 20, 1907

Double Star No 100 (Comstock's List) = γ Leonis AB
10 12 +20,5 Phot. R Fr. Obs. Bowie Ser
12 22
2 10

P.A 300 Dist. 5,6 ± Magn. 3.0 10.0
Index R & A ∫.

	323.6	Companion C dis.	
10 28 16	36.7	73.1 ^	
	150.8	56.7 ^	
	207.5	129.8 ^	0.98 ^
	331.5		0.94 ^
	30,3	58.8 ^	
	141,5	75.0 ^	
	216.5	133.8 ^	0.90 ^

Index L & B B.

	229.3		
	307,5	78.2 ^	
	61.9	58.2 ^	
	120.1	136.4 ^	0.85 ^
	240.0		0.85 ^
	299.8	59.8 ^	
	53.0	76.5 ^	
	129.85	136.3 ^	0.85 ^

10	36	25	
	64	41	^
10	32	20	^
5		+16	^
15	32	36	^

Mean 0.90 ^

An attempt was made at first to compare γ Leonis A B but primary image did not

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1907phae.proj..584w

April 20, 1907

dis. in phot. Accordingly companion B whose brightness was desired was compared with companion C whose brightness had already been measured. Hence ~~the~~ previous group is a measurement of ~~the brightness~~ difference in brightness between companions C and B.

Ht's watch used for times tonight
Watch 16 sec slow

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1907phae.proj..584W

April 22, 1907 (Monday)

Examination of new double-image prism (intended for Peru and just made) Turned on Jupiter. When double-image prism is run down ~~to~~ eyepe as near eyepiece as possible, the contiguous limbs of Jup. overlap by approximately to one fifth to one quarter the diameter of image of Jup., but the centres of images do not at all coincide. When, on the other hand, the double-image prism is run up to end of phot. tube, the contiguous limbs of Jup. are seperated by one quarter the diameter of Jupiter's image, or perhaps a very little more. The distance between the outer face of field lens of eyepiece and the nearest face of double-image prism is ~~2~~ about 28 or 29 millemeters. This is evidently so large that the double-image prism is too far removed from the focal plane of one inch eyepiece, so that the images cannot be superimposed, and also cannot be brought closely enough together to handle close, double stars. The images themselves are very good and the color very good furthermore the emergent pencils seem to be very well superimposed

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1907phae.proj..584W

April 22, 1907.

~~4th type Stars~~ +14 1283 H. Obs. Bowie Ref.

5	59	+14:8
10	49	
4	50	

Abandoned Region too low and sky ~~too hazy~~ cloudy

Double Star H 136 (Comstock's List) = ρ Coronae

15	55	+33.6
11	20	
4	35	
7	25	

Abandoned Too cloudy

Expts. with new Plate. over pp. 193–4

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1907phae.proj..584

April 22, 1907.

Equalizations of two images of star taken at random (star could not be identified on account of clouds) Images cannot be brought together and are somewhat widely separated ~~Phot.~~ Neither phot. nor images reversed Same image dis. throughouts, as in eclipse of Jups. Sats.

185.2	107.3^	1.48^
292.5	105.0^	1.54
187.5	104.5^	1.55^
292.0	104.6^	1.54^
187.4	103.9^	1.56^
291.3	103.8^	1.56^
187.5	104.3^	1.55^
291.8		

Other experiments. Four setts taken. Phot. reversed in middle of each sett. Same image dis. throughout, so that dis image is to right in first half of sett, and to left in last half of sett.

186.0		
291.0	105.0^	
202.0	75.3^	
277.3	180.3^	
	179.7^	+0.01^
23.1		
99.9	76.8^	+0.02^
186.3	105.2^	
291.5	182.0^	
	178.0^	+0.04^

9h 20m±

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1907phae.proj..584W

April 22, 1907.

6.2		
109.1	102.9°	
198.7	78.3°	
277.0	181.2°	
	178.8°	+0.02°
20.9		
98.5	77.6°	0.00°
188.0	101.0°	
289.0	178.6°	−0.03°

Mean +0.01

All the preceding experimental settings made through rather homogeneous cloud.

9 45 o Sky thickly cloudy. no chance for anything further.

It's watch used for times
Watch 19 sec slow

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1907phae.proj..584W

April 24, 1907 (Wednesday)

Expts. with New Double-Image Prism (to go to Peru), this prism being inserted in carriage of Phot. R. Since the evening of April 22, the ~~sy~~ spring cylinder holding the prism has been brought nearer the 1 inch eye-piece as near as present holder of prism will admit. The distance however from front face of field lens to the ~~same~~ nearer face of prism is about 15 to 16 millemeters tonight against 28 to 29 millemeters on April 22. The distance is still considerably too large. Turned telescope with phot. on, on Jupiter. When prism is as near eyepiece as possible the two images of Jup. seem to overlap by about one quarter the diameter of Jup. and possibly a grain more. When, on the other hand the prism to run up to farther end of phot. tube the images of Jup. seem to be seperated by a little over one quarter the diameter of Jup. The seeing is somewhat poor owing to wind, rapidly rising barometer, and sudden clearing of storm Barring out these unfavorable circumstances, the images seem to be very good and only slightly colored at limb although the power is 270. When the prisms are properly adjusted with reference to eye-piece, in its own tube, ~~it~~ they will evidently work very nicely.

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1907phae.proj..584W

April 24, 1907.

Fourth Type Star +14°1283 Phot. I St. Obs. Sower Cor

5 59 +14.8 9.5 inch cap used

10 44 Color 5 in eyepiece

4 45

Index L & B

123.9 ← 4th type dis.

202.4 78.5^

312.0 61.0^

13.0 139.5^ − 0.78^ B

132.5 −0.80^

195.0 62.5^

305.1 75.9^

21.0 138.4^ − 0.81^

Index R & A

31.0

114.6 83.6^

222.3 61.8^

284.1 145.4^ − 0.67^ A

39.4 −0.62^

107.6 68.2^

213.6 82.4^

296.0 150.6^ − 0.56^

Mean −0.71^

8 42 2

8 49 35

91 37 ^

8 45 48 ^

5 +16 ^

13 46 4 ^

7690.5727

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1907phae.proj..584W

April 24, 1907.

S. T. 11h 20m
H. A. +5 0
Dec. +15.0
P. A. 202 Ver B
Sprockets -5.5 B
" -4.5 b

Fourth Type Star +38° 1539 Phot. J. W. Obs. Bowie Res.

6	27	+38.6
11	27	
5	0	

9.5 inch cap used

b color 5 in phots.

Measurements on fol. page.

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1907phae.proj..584W

April 24, 1907.

Index Zed

	148.2	4th type dis
9 11 0	179.9	31.7^
	329.8	27.0^
	356.8	58.7^ -2.91^

B

	150.2	-2.88^
	177.3	27.1^
	325.5	33.6^
	359.1	60.7^ -2.84^

Index R+B

	53.7	
	92.9	39.2^
	238.6	29.4^
	268.0	68.6^ -2.55^

A

	60.0	-2.64^
9 18 5	87.5	27.5^
29 5^	236.0	36.3^
9 14 32^	272.3	63.8^ -2.72^
5 +16^		
14 14 48^		

Mean -2.76^

7690.5936 S.T. 11h 48m

R.A. +5 20

Dec. +39.0

P.A. 189.8 Ker B

Sprockets -3.5 B

" -2.5 b

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1907phae.proj..584W

April 24, 1907

Double Star No. 86 (Comstock's List) = 75 Bianchi

9 0 +27.2 Phot. Yk. Obs. Bowie Rec

11 55

2 55

P. A. 40° Dist. 2.0 ± Mags. 6.1 9.9

Index Above A.

144.3 ← South. & brighter dis

9 41 16

163.2 18.9"

327.0 15.4"

342.4 34.3" 4.11"

150.3 4.14"

160.7 10.4"

322.5 23.1"

345.6 33.5" 4.16"

Index Below B.

52.0

78.4 26.4"

236.7 14.4"

251.1 40.8" 3.72"

56.3 3.79"

9 46 5 73.1 16.8"

87 21" 233.0 21.6"

9 43 40" 254.6 38.4" 3.86"

5 +16"

14 43 56"

Mean 3.96"

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1907phae.proj..584W

April 24, 1907.

Eph. 11 Sz			B. 394		
11	4	54.0	9	50	0.0
11	5	53.5	9	51	0.0
11	6	53.5	9	52	0.0

Limit of Vis.

11h	19	24	40.1^		131.1
		38	39.5^		171.2
			79.6^		
		55	39.8^	+2.2	133.5
	20	13			173.0

11	19	48^
1	-14	-52^
10	4	56^

Reap. Jup. II Phot. (note) St. Obs. Sonvie Rec
Comp. with Sat. on prec. side = Sat. I

10	10	9^	11	25	1		Seen
	10	18^			10		Seen
	10	36^			28	+1.4^ 56.0^	127.0
	10	48^			40	+1.3^ 57.5^	183.0
	11	2^			54	+1.3^ 58.0^	125.5
	11	16^		26	8	+1.0^ 64.0^	183.5
	11	31^			23	+0.8^ 69.5^	119.5
	11	43^			35	+0.7^ 72.0^	189.0
	12	2^			54	+0.4^ 79.2^	117.0
	12	27^		27	19	+0.3^ 83.2^	196.2

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1907phae.proj..564W

April 24, 1907.

10	12	41^	11	27	33	+0.2^	85.5^	113.0	
	13	2^			54	+0.1^	88.3^	198.5	
	13	22^		28	14	+0.1^	88.3^	110.2	
	13	53^			45			198.5	
				28	57		88.7^	109.3	
11	29	29^		29	13		86.1^	198.0	1
1	-14	-52^					174.8^		
10	14	37^			36	+0.1^	87.4^	111.0	
				30	10			197.1	
					29		85.3^	111.5	
11	31	9^		31	2		84.9^	196.8	2
1	-14	-52^					170.2^		
10	16	17^			24	+0.2^	85.1^	111.1	
					41			196.0	
					54			110.0	
							85.0^		
11	32	21^		32	14		84.6^	195.0	
1	-14	-51^					169.6^		3
10	17	30^			33	+0.2^	84.8^	111.5	
					43			196.1	
				33	2		83.4^	111.6	
11	33	23^			12		84.4^	195.0	
1	-14	-51^					167.8^		4
10	18	32^			33	+0.2^	83.9^	111.7	
					45			196.1	4
				34	41		84.8^	112.0	
11	35	10^		35	2		83.3^	196.8	
1	-14	-51^					168.1^		5
10	20	19^			23	+0.2^	84.0^	111.7	
					35			195.0	
					54		86.0^	110.5	
11	36	21^		36	14		84.2^	196.5	
1	-14	-51^					170.2^		6
10	21	30^				+0.2^	85.1^		

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1907phae.proj..584W

April 24, 1907

	11	36	31		110.8	6
			46		195.0	
			59		112.1	
11	37	24^	37	16	83.4^ 194.9	7
1	-14	-51^			166.2^	
10	22	33^		35	+0.3^ 83.1^ 112.1	
				44	195.5	
				59	85.2^ 111.6	
11	38	18^	38	12	84.3^ 196.8	
1	-14	-51^			169.5^	8
10	23	27^		25	+0.2^ 84.8^ 111.3	
				36	195.6	
				52	83.5^ 111.8	
11	39	15^	39	8	85.8^ 195.3	
1	-14	-51^			169.3^	9
10	24	24^		21	+0.2^ 84.6^ 111.2	
				39	197.0	

☉ & b. 1182

11	44	50.5
11	45	50.5

☉ 394

10	30	0.0
10	31	0.0

Region rather low especially so towards end of eclipse. Considerable wind; images somewhat colored, Sat. II reap. quite close to Sat. III. It was quite impossible to get

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1907phae..proj..584W

April 24, 1907.

a ~~sa~~satisfactory adjustment of Sat. I with reference to Sat. III and Jup. so that, ~~that~~ observations were somewhat impeded and rendered somewhat difficult on account of the above reasons. A little delay in first setting caused ~~by the~~ on account of low altitude and rather poor seeing as well as from the fact that Sat. reap. somewhat out of position and quite close to Sat. III On account of above this eclipse not so good as usual.

The phot. used in above eclipse as ~~as~~ well as in the prec. observations of a double star, was phot. R with one (of the two) quartz - prisms removed. The Phot. had been used the early part of evening to try the Peruvian prism, this having been removed, only one quartz prism having been put in for observations tonight.

H's watch used for times
Watch 16 sec. slow

∴ From $11^h\ 6^m\ 53.5^s$ to $11^h\ 19^m\ 32.5^s$ pub. $1^h\ 14^m\ 53^s$.
" 11 19 32.5 " 11 32 11.5 " 1 14 52.
" 11 32 11.5 " 11 44 50.5 " 1 14 51.

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1907phae.proj..584W

April 25, 1907 (Thursday)

Expts. with new Double-Image Prism (to go to Peru) this prism being inserted in carriage of Phot. R. Tried double-image prism in various ways down near focal plane pulled to. After inserting phot., ran carriage down towards eyepiece end of phot. as far as it would go, also pulled double image prism a little out of phot, also held it in hand outside phot. with varying distances even to the extents of two or three inches (the telescope being turned on Jupiter) also ran prism a little up the tube, the other way. Then reversed prism and went through all these processes again. In all the previous conditions, I used both the two inch and one inch eyepieces, (the one inch eyepiece having a good working distance) with and without Nicol. The result was that in no one of the previous conditions do the two images of Jup become at all central but, as in expts. on April 22+24 the images at the most overlap by only one fifth to one quarter the diameter of Jup.

Above expts. made between 7:15 and 8:20. Troubled at the last by haze and casual cloud but not seriously

8 30 Heavier clouds coming

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1907phae.proj..584W

April 25, 1907.

8 40 0 Sky pretty thickly cloudy everywhere
Jup. faintly visible and no stars visible

9 10 0 Sky thickly ~~thickly~~ cloudy everywhere
with no prospect of clearing evidently
no chance for anything further

It's watch used for times
Watch 13 sec slow

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1907phae.proj..584W

April 27, 1907 (Saturday)

Double Star No. 49 (Comstock's List) = α Auriage

5 7 +45.9

10 25

5 18

Index Left

336.5 South & bri

7 59 59 338.0

156.0 157.8

155.0 ~~337.6~~

336.1

337.9

156.0

157.7

67.1

Impossible to measure this double with any certainty and with any conclusive accuracy. The principal ~~light~~ star is so bright, flooding the field with light, and the dif. in brightness is so great that it is impossible to measure this double with any certainty. Abandoned. Reject above

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1907phae.proj..584W

April 27, 1907

Double Star No. 75 (Comstock's List) = 29 Monocerotis

8	2	-2.6
10	59	
2	57	

Abandoned. Sky cloudy in this region

Double Star No. 94 (Comstock's List) = Σ 1351

9	2	+63.7
11	2	
2	0	

P.A 275° Dist 4.'3 Mags. 5.0 & 10.0

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1907phae.proj..584W

April 27, 1907.

Index Above

	67.1	Fol. a brighter dia	
9 10 15	77.0	9.9″	
	248.3	7.3″	
	255.6	17.2″	5.62″
	67.3		5.52″
	75.0	7.7″	
	247.6	11.2″	
	258.8	18.9″	5.41″

Index Below

	337.0		
	348.8	11.8″	
	157.4	9.2″	
	166.6	21.0″	5.18″
	337.5		5.22″
	346.2	8.7″	
	156.0	11.5″	
	167.5	20.2″	5.27″

9	17	45
	27	60
9	13	60
5		+13
14	14	13

Mean 5.37″

The above group, owing to the fact that only one pair was available tonight, the two images compared cannot be quite reversed over each other, but I tried to obviate

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1907phae.proj..5849

April 27, 1907.

this as much as possible by placing the images so that he could turn his head first to the right and then to the left.

The companion wanted, according to the double star list, is one at about this P.A but the distance was 23" The sky is somewhat hazy and there is some light cloud and the principal component is rather bright, yet on examination with power 270, no companion can be seen at this P.A or distance, so that it was provisionally assumed that 23" might be wrong, and 230" might be intended, the Prof. Comstock, perhaps, having accidently made this error. Accordingly the above pair was provisionally measured

Double Star No. 97 (Comstock's List) = 9 Sextantis.

9	31	+5.3
12	18	
2	47	

P. A. 290° Dist. 0.'9 ± Mags 7.0 & 9.1

Measurements on fol. page

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1907phae.proj..584W

April 27, 1907.

Index R & B A.

9 52 57

3 12.2 4.0
8.0 ← Fol. & brighter dis.

139.4	54.0^	
180.9	41.5^	
	95.5^	1.77^
317.6		1.77^
1.7	44.1^	
136.5	51.5^	
188.0	95.6^	1.77^

Index L & A B.

224.0		
275.0	51.0^	
49.9	45.1^	
95.0	96.1^	1.75^
230.8		1.73^
270.8	40.0^	
42.8	57.9^	
100.7	97.9^	1.71^

Mean 1.75^

9	59	56
	111	113 ^
9	55	86 ^
5		+13 ^
14	56	39

Measurements in above group difficult on account of clouds and ~~very~~ poor images. There is a strong east wind and high barometer. A storm is moving off the coast. Impossible to focus and get sharp images, images (especially the one of brighter component) blurry.
~~It's watch used for time tonight~~
Watch 13 sec. slow

7
7.5
12
76

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1907phae.proj..584W

April 29, 1907. (Monday)

Fourth Type Star +24° 1686 Phot J H. Obs Bowie Rec

7	36	+24.8
10	6	
2	30	

Color 4 in ordinary eyepiece and " " " phot.

Index L & A

34.4 4th type dist.

111.9	77.5'	B
223.9	57.5'	
281.4	135.0'	-0.88'

7 45 57

46.2 -0.91'

101.3	55.1'	
214.6	76.9'	
291.5	132.0'	-0.94

Index R & S

308.5

13.8	65.3'	A
139.5	47.1'	
186.6	112.4'	-1.36'

319.7 -1.34'

7.9	48.2'	
130.2	66.2'	
196.4	114.4'	-1.32'

Mean -1.12'

7	54	14
	99	71
7	49	66
5		+12
12	50	18

7695.5349

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1907phae.proj..584W

April 29, 1907

S. J. 1.4 50
H. A. + 3 20
Dec. + 24.8
P. A. 164.8
Sprocket -5.5 A
" -4.5 B
" -4.0 b

Double ~~Stars~~ Nr. 94 (Comstock's List) Σ 1351

9	21	+ 63.7	Phot(note) Nr. Obs. Bowie Rec.
11	6		
1	45		

P. A. 270° Dist. 0.4 Images 3.5 & 9.1

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1907phae.proj...584W

April 29, 1907

Index Rects A.

65.6 ← Sol. a brighter dis.

75.8	10.2^	
246.2	9.2^	
255.4	19.4^	5.36^

65.6		5.20^
76.7	11.1^	
245.2	11.2^	
256.4	22.3^	5.05^

Index 2 & 8 B.

334.0		
346.8	12.8^	
156.4	8.9^	
165.3	21.7^	5.11^

334.6		5.18^
346.0	11.4^	
156.0	9.1^	
165.1	20.5^	5.24^

8 33 2

8 42 55

75 57 ^

8 37 58 ^

5 +12 ^

13 38 10 ^

Mean 5.19^

Much troubled by clouds during above observation on double. The clouds were of ~~the~~ southern scud character. The scud moved a little slowly. The images, when equalization was attempted, were a considerable part of ~~the~~ time quite faint and then at times somewhat brighter and then would ~~would~~ die Part of

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1907phae.proj..584W

April 29, 1907.

the equalizations were very difficult. Much care exercised and general result thought to be pretty good

Double Star No. 104 (Comstock's List) = Σ1516 AB

11	5	+74.2
11	50	
0	45	

P. A. 95° Dist. 22" Mags. 7.0 7.3

Measurements on fol. page

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1907phae.proj..584W

April 29, 1907

Index Left & below B.

	206.4	Prec. & brighter dis.	
9 12 48	294.6	88.2^	
	29.6	86.0^	
	115.6	174.2^	0.11^
	215.5		0.24^
	286.8	71.3^	
	26.5	89.1^	
	115.6	160.4^	0.37^

Index R & A A.

	122.8		
	200.7	76.9^	
	297.4	85.7^	
	23.1	162.6^	0.33^
	122.0		0.34^
9 20 26	194.4	72.4^	
	293.6	88.5^	
	22.1	160.9^	0.36^

	32	74^
9	16	37^
5		+12^
14	16	49^

Mean 0.29^

Somewhat troubled by southern scud.

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1907phae.proj..584W

April 29, 1907.

Double Star No. 105 (Comstock's List) = Σ1516 A C
Put on power 270 but 11th magn. companion at distance 7" not seen and not certainly suspected tonight. If the distance, as given, is correct, this may be partly due to moonlight and partly to poor atmospheric conditions

9 45 0 Heavy scud now overspreading the whole sky and forming a continuous sheet or stratum. Only one or two bright stars visible. Evidently no chance for anything further.

The phot. used tonight in measurements of double stars was the same phot that was used on the last observing night, that is Phot R, so-called, with only one quartz prism, the other quartz prism having been removed in connection with expts. on double-image prism, intended for Peru

It's watch used for times tonight.
Watch 12 sec. slow.

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1907phae.proj...584W

May 1, 1907 (Wednesday)

7 10 0 Sky pretty cloudy.

7 15 0 More clouds coming.

7 25 0 Nearly the whole sky covered with heavy clouds.

0 0 0 Sky still very cloudy

Double Star No. 49 (Comstock's List) ∝ Auriage

5	7	+45.9	Phot	H. Obs. Bowie Rec
11	0			
5	53			

P. A. 145 Dists. 2.5 Mags. 1.0 & 9.0

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1907phae.proj..584W

May 1, 1907.

Index

70.5

h 19 42 72.3

Reject. Bright images don't dia. 6 in. cap put on.

250.9

h 28 38 252.5

Abandon. Reject above. Even with 6 in. cap on the principal is so bright and troublesome, the companion so faint, so many bars of light in the field and dia. of bright star so poor, that satisfactory measurements are impossible

Double Star No. 114 (Comstocks List) Σ 1658 A C

12	38	+8.5
11	48	Phot. H. Obs. Bowie Rec.
	50	
11	10	

P.A 260° Dist 1.6" ± Mags. 8.7 9.1

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1907phae.proj..584W

May 1, 1907.

Index
219.0
9 8 12 205.2
clouds
43.3
99.4

227.5
Stopped by clouds. Reject.

Double Star No 26 (Comstock's List) Σ 296

2	35	+48.9
12	45	
10	10	

Abandoned. Too low

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1907phae.proj..584W

May 1 1907

Double Star No. 114 (Isomstocks List) = Σ 1658 AC
Phot. R. Cle Borrie
P.A 260 Dist 1.8± Mags. 8.5 & 9.3
Index Right A.

9	59	40	137.2 Fob. & brighter dis	
			186.3	49.1^
			295.7	80.4^
			19.1	129.5^ 0.99^
			127.1	1.00^
			195.4	71.3^
			307.4	57.3^
			4.7	128.6^ 1.01^

Index Left B.

			41.5	
			101.0	59.5^
			213.0	70.4^
			283.4	129.9^ 0.98^
			35.6	1.04^
10	5	5	111.3	75.7^
19	64	45 ^	225.5	48.9^
9	62	22 ^	274.4	124.6^ 1.09^
5		−2 ^		Mean 1.02^
15	2	20 ^		

Phot. R (with one quartz prism removed) used on doubles tonight being the same photometric arrangement as used on last night. It's watch used for times Watch 2 sec. fast

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