KG
#365
154

KG11365754

KG 11365.754

HARVARD
UNIVERSITY
LIBRARY
JUL 17 1956

Mon. Sept 6, 1909
L.C. Obs JD 8556 eye

10 50	o Cet.	021403	est 3.0	

1 386
— 64 L.P.P
— 12

Dec 6 1909. Monday

JD 8647 L. C.

Comet Halley 6" W. Eq.

Comet prec BD +15.594 (8.0)
by 1m 30s & 2' South of it

* f fol comet by 14s and 4' North
* g " star f by 10s and 1' North

9 15 est Comet = f 4 ≡ 2 g

o Ceti 021403 FLG.

est 6.7

6" W.Eq. Dec 8, 1909 L.C.Obs.

Halley Comet

565 (7.7)

Comet follow o l. m + 15 by

98 0.8 m and is 10' S. Comet

has a faintest star 0.1' p. +

2 S another faint star follows comet

0.1' + 1' N these will be $\overset{h}{\lambda} + f\lambda^{k}$

$\overset{h}{f}$ comet 2 λ^{k}

Comet faintly seen in the 2½" telescope

Dec 14 1909 (Tuesday)

LC Obs   LD 86   6"

Halley's Comet

3 23 +12.5
1 00
2 23 ε

Comet fols DM +14° 577 (9.5) by 8s same Dec
star k^n fols comet by 10s & 3' North
" k^o fols DM +14°.577 5A & is 5' North

7 32   est k^n 3, 4 k^o

Note:– Comet seems no brighter (or if as bright) as on previous night of observation. Perhaps hazy condition of sky may have something to do with its appearance.

R Arietis 021024 est 10.4
R Andr 001838 est 9.3
X Ceti 031401 est 11.4

Recorded by LC after leaving 6".

L

8

Mon. Jan. 3, 1910

L.C. Obs 6" W Eq ~~JD~~ 8 675

δ β Cygni 2138 ~~43~~

27 30

5 52 W

8 26

3 35

5 59 N

+43.6

Var susp. if ~~so~~, equals 11.8

~~Flint to watch~~ =

X Ceti 031401 Var 10.4 ?

3 45

0 34

3 37

0 23 W

Cldz troublesome

—1.3

S Orionis 052404 est

3 46

1 38 E

All cldy to West

with quit

2

L

Tues. January 4, 19~~09~~ 10

L.C. Albr 6" J.D. 8676

7 10 Temp = −2° F.

Halley's Comet

2^h 33.3 +10 45.4

Comet prec. S.D.M. +10°.295 (9.5)
by 0.5 m. + is 4' N
Step P^2 = S.D.M first referred to
" P^2 is the prec. of the line of three stars of which ~~the~~ following one is S.D.M. +11°.291 (9.0)

7 2' Est. P^2 3 0 P^2
Comet very near computed place possibly a trifle brighter than when last observed & nucleus more extended but not any appreciable sign of tail.

est 10.8

9.46
a
0.44 m

+10.9

Jan. 4 19~~09~~ 10

SS Cygni 2138 43 est 11.6

2648

5 10 W

+43 3

25 2

5 16 W

2
—
L.

~~Mon~~ Fri. Jan. 7, 1910.

R.C. Obs. J.D. 8679 6" W Eq

Halley's Comet est t 3,2 w
see below 2 44

1 53.8 +10 19.3 0 52 w

star t prec DM +10° 271 (9.5) by 0.4 m
and is 3' South +10 7

star u prec DM +10° 270 (9.0) by 0.5 m
and is 6' North

Comet easily picked up, but not much brighter than on prev. ngt of observation.

Mon. Jan. 10, 1910

L.C.-Obs. ~~AD~~ JD 8682 6" W. Eq.

SS Cygg. 213843 est 11.2
27 10
5 32 W
5 38 W
3 13.0
Set clock back 3m
+43.4

R Cygni 193449 est 11.0
27 12
7 38 W
7 50 W
3 15
+50.2

RT Cygni 194048 est 7.8
7 47 W
3 19
+48.8

TU Cygg 194348 est 11.4
~~7~~ 7 47 W
3 21
+49.1

Z Cygg 195849 est 11.2
7 34 W
3 23
+50.1

Jan. 10 1910

RS Cyg	200938	est 8.9	7 24 w 3 26 +38.8
SX Cyg	201130	too low in haze	
WX Cyg	201437b	est 10.6	7 23 w 3 30 +37.4
U Cyg	201647	est 8.8	7 26 w 3 34 +47.8
RW Cyg	202539	est 9.4	7 21 w 3 37 +39.7

Jan. 10, 1910

V Cygni	203847	est 10.8	7 19 w 3 48 +48 2
RZ Cyg	204846	est 10.7	7 11 w 3 50 +47. 2
X Cephei	210382	est 9.7	3 52 7 12 w +829
T Cephei	210868	est 9.6	3 58 7 2 w +68. 2
S Cephei	213678	est	

Jan. 10.1900.

x Ceti	031401	est 9.4	0 57 1 44 W −1.4
R Arietis	021024	est 8.0	5 8 2 58 a +24.7
S Orion	052404	est 8.4	0 3 W 5 28 −4 9
— Cass	023765	b 3 a 4 c 3 d 4 e Est Var to, 4A	3.40 3.02 W +65.4
— Cass 18 8	024462 30 = L.P.P.	b'3, 3c ~~a, the c d~~ a 5 b 3 b' b c, d	5 50 3 3 W +62.4

Wed Jan. 19, 1910

L. C. Obs 6" W Eq

Comet a

Obs. R.A.	1 6	see in HLg. L.C. ~~Ob~~			
20 27.0	1 9	00	−16.0	4 : 42	W
28.4	1 10	08	−15.9	4 : 42	W
27.8	1 10	45	−15.9	4 . 43	W
28.2	1 11	12	−15.9	4 : 43	W
28.8	1 11	45	−15.9	4 : 43	W
28.4	1 12	27	−15.9	4 : 44	W
27.2	1 13	15	−15.8	4 46	W
27.0	1 14	2	−15.9	4 47	W
28.0	1 15	0	−15.9	4 47	W
27.6	1 15	37	−15.9	4 ~~47~~ 48	W
28.1	1 16	6	−15.9	4 48	W
28.6	1 16	33	−15.9	4 48	W
28.8	1 17	3	−15.9	4 48.5	W

Clds.

28.7	1 19	10	−15.8	4 ~~4~~ 50.5	W
27.9	1 19	53	−15.85	4 52.0	W

Clds

20 28.8	1 22	45	−15.8	4 54.0	W

Jan 19, 1910.

Comet

	Obs RA.				
20	28.5	1 23	30	−15.7	4 55.0 W
	28.6	1 25	38	−15.7	4 57.0 W
	28.7	1 26	15	−15.6	4 57.5 W
	29.2	1 27	15	−15.6	4 58 W
	29.3	1 27	49	−15.6	4 58.5 W
20	29.2	1 28	14	−15.5	4 59 W
20	28.3			−15.8	
	4.6			−0.4	
20	32.9			−16.2	

Corr. Obs place

7

Setting on star at

$20^h\ 40^m\ -10°$ Dec Pos

Waugh Rec.

20	38.5	1 41	30	−9.5	5 3.0 W.
	38.0	1 42	00	−9.5	5 4.0 W.
	37.9	1 42	22	−9.5	5 4.5 W.
	37.8	1 42	48	−9.5	5 5.0 W.
	37.7	1 43	10	−9.4	5 5.5 W
	38.1	1 44	08	−9.4	5 6.0 W.
	37.6	1 44	35	−9.5	5 7.0 W.
	37.6	1 45	08	−9.6	5 7.5 W.
	37.7	1 45	43	−9.5	5 8.0 W

Jan 19, 1910

Star continued.

20	37.4	1	45	55	−9.5	5.85	W.
	37.4	1	46	23	−9.5	5.90	W.
	37.3	1	46	49	−9.6	5.95	W.
	37.4	1	47	22	−9.5	5.10	W
20	37.7		mean		−9.5		
20	42.3		~~of~~ Comp 1900 place star		−9.9		
	+4.6				−0.4		

Thurs Jan. 20, 1910

LC Obs JD 8692 6" wh

Looked for Comet a 1910

Still too cldy to see it

5 10

Miss Harwood Rec. Watch C

'Comet a Obs R.A.

1 36 20	-12.7	4 54.5	20 39.8
~~4 34 25 50~~			
1 35 12 ~~th~~	-12.5	4 56.0	39.2
1 3~~6~~5 55	-12.8	4 56.5	39.4
1 36 20	-12.8	4 57.0	39.3
1 [illegible]40	-12.8	4 57.0	39.7
1 3[illegible]58	-12.9	4 58.0	39.0
1 37 28	-12.8	4 58.0	39.0
1 38 0	-12.8	4 58.0	40.0
1 38 12	-12.8	4 58.5	39.7
1 38 28	-12.8	4 58.5	40.0
1 3~~8~~9 48	-12.8	4 59.0	39.8
1 39 34	-12.8	4 59.5	40.1
	-12.8	mean	20 39.6
1 40 52 in clouds.			
	- 0.35		- 5.3
Ann off ar Place ←	- 13°.15		$20^h 44.9^m$

1 32± Comet first seen with N2 in Sep in clds.

Thurs. Jan 20. 1910

L.C. Obs. M. Harwood recorder

Obs R.A.	h m s	Venus		
22 0.8	1 44 50	−7.4	3 44.0	
1.3	1 45 19	−7.4	3 44.0	West
1.3	1 45 45	−7.5	3 44.5	~~West~~
1.1	1 46 5	−7.5	3 45.0	

1.1
22 ~~1.1~~
22 6.4
+ 5.3

−7.45
−7.80
−0.35

Sun Jan 23, 1910
L.C. Obs 3' Norwich Ob.
o Ceti 021403
est 84

T Urs Maj. 123160
est ~~8~~ 7.5

S Urs Maj. 123961
est 9 2

Tail Comet a = 10° est

L.P.B

Wed Jan. 26, 1910

C.C. Obs 6" W Eq.

SS Cygni Z13843 est 11.8

S Ceti - 001909 est 10.8

Halley's Comet Est 11.1

1 8 +9.0 Comp. with +9.0.

4 38 star g + k of 3.41 m.

S Pisces

~~3 25~~ W region 4.48

3 30 W Moon high & sky hazy but care used in estimating

S Pisces 01~~X~~1208 Invisible 11.8

Tail Comet a = 20° est.

Jan 26. 1910

R. Arietis 021024 Est 7.3

8 33 ST Tauri 053913 est a 2½ b

Flint's watch used = 5m slow.

5 40 + 14.0
5 8
0 32

Est seq = a 4 b 3 c 4 d 4 e 5 f

5 15
0 22.2 E

+13.2

Gem 055424 est e 2 var 1 f.

8 44

Est seq. a 4 b 5 c 3 d 5 e 2 f.

5.27
0 26 E

+24.9

RZ Gem 055622 Est d 1, 2 e

8.49

a 5 b 3 c 3 d 6 e 3 f

5.31
0.23 E

+22.7

SS Gem 060222 Est. a 2, 3 b 1

9,01

a 4 b 3 c 6 d

5.43
0.18 E

+23.0

Jan 26 1910

061614 RS Orionis est a₀ 4 b

5
5 ~~2~~ 0

98

0.24 E

a 4 b 4 c 4 c, 3 d

+15.1

U Lyrae 063159

Moon too bright
Tel. near
Zenith too difficult
to find.

Flint's Watch 5 ^{m} slow at 9:30

$\frac{9}{22}$ $\frac{39}{30}$ L.P.P.

Fri. Jan. 28, 1910
L.C. Obs JD. 8700. 6" Wey.

Comet a, 1910

21 36 +40
26 20
4 44

~~02 29.55 +0.4~~

02^h $29^m.55^s$ $5^h.05^m$ W +0°.4.

∴ Obs. RA = 21^h ~~25^m~~ & Obs Dec +0°.4
24.9 −0.4
~~+1.6~~ ~~0.0~~
~~21 26.5~~ +0.2

Venus. ~~22 0.8~~

02 34. 34. 4.37 W −6.8

∴ Obs RA = 21^h $57^m.6$ & Obs. Dec −5°.8

~~Comp. Ra. 21 59.2 & Comp. Dec. −6.2°~~

~~+1.6~~ ~~−0.4~~ 2

Tail Comet a = 22°

21 57.6 −5.8
Venus 22 0.8 −6.2
3.2 −0.4

Comet 21 24.9 +0.4
3.2 −0.4
21 28.1 0.0

Sunday Jan 30 1910

J. H. C. 8702 6" W. Equ.

Comet A1910

L. C. Obs.

Fix Lampson pier of 6" W. Equi

Comet a

2 35 15	~~4~~ 5 06.0	W	+2 2	
36 13	5 07.0	W	+2.2	
36 42	5 7.5	W	+2.2	
37 55	5 8.0	W	+2. 2	
38 22	5 9.0	W	+2. 2	
2 36 53	5 7.5	W	+2 2	mean

Star = Dm + 1.4517

39 00	5 9.0	W	+2.2
39 32	5 9.0	W	+2.2
40 02	5 9.5	W	+2 2
40 58	5 10.0	W	+2.2
41 18	5 10.5	W	+2 2
2 40.2	5 9.6		+2 2

Venus

2 41 48	4 48.0	W	- 5.6
42 17	4 48.5	W	- 5.6
42 36	4 49.0	W	- 5.6
42 57	4 49.0	W	- 5.6
43 18	4 50.0	W	- 5.7
2 42.6	4 48.9		-5.6

Obs RA ☄
2 1 29.4 +2.2 = Dec
4.1 - 0.3
33.5 +1.9
21

Obs Pos ✱ = +2.2
2 1 ~~4~~ 30.6

Obs RA ~~☄~~ Venus
= 2 1 53.7 - 5.6
- 5.9
57.8 - 0.3
21 +4.1

1909phat.proj..755C

Jan. 30, 1910

Corr. obs place $= 21^{h}\ 33.5^{m}$ $+1.9^{\circ}$

Star + 1.4517 B.D.

Ob. R.A. 21 30.6 Obs Dec +2.2

1910 Pos " 21 36.0 " " +1.8

5.4 − 0.4

Ob R.A. ☄ = 21 29.4 +2.2

5.4 0.4

1910 Pos ☄ = 21 34.8 +1.8

Tail Comet a = 22°

Thur. Feb. 1, 1910
*~~L.O.~~ Obs 6" W. Eq.
Comet a 1910 M. H. recorder—

21 40 +3.6
21 36 +4.0
26 36
5 0 W

21 32 +1.6
26 42 1.8
5 10 W 3.4

Comet a

2 44 53 +3.5 5:12 W
2 49 38 +3.5 5:15 W
2 50 12.5 +3.5 5:15.5 W
2 51 1 +3.5 5:16 W
2 51 22 +3.5 5:17 W
Star a 2 52 41.0 = Dm + 3°.[illegible]599
~~2 54~~ 2 37.5 pos. angle not well set.
Comet a 2 55 18.5
Star a 2 5~~6~~7 11.5 2 11.0
Comet a 2 59 22.5
~~a 5 f~~
a 6 f 4 = prop of decl & ling S,

Star f 3 3 52.0 0 33.5 = Dm + 3.4577
Star a 3 4 25.5 2 18.0 = best transit time.
Comet a 3 6 43.5

Tues. Feb. 1. 1910

L. C. Ob. M. Harwood recorder:

Setting on star a

	3h 7m 12s	+ 3.7	5 ~~25~~ 35 W
Comet a	3h 7m 49s	+ 3.5	5 ~~24~~ 33 W
star c	3h 9m 5s	+ 2.4	5 ~~31~~ 31 W
star c	3h 9m 51s	+ 2.4	5 32 W [star c = star at 21 40 +2.0]
comet a	3 10 19	+ 3.5	5 36 W
star d	3 12 11	+ 2.2	5 42 W = DM. + 1° 4517

Cat. Pos. ✱ a = +3.4599 = 21 34 30.22 + 3 19 50.5 ~~26.7~~

2 45.91 + 9 ~~35.1~~ 26.7

1910 Pos ✱ a = 21 37 16.13 + 3 29 ~~25.6~~ 17.2

Δ comet a = + 2 18.0 − 15 55

21 38 34.0 + 3 13 ~~37~~ 22

SS Cygni 21 38 43 est 9.2

27 20

542 W

3 21

5 47 W

+ 43.4

Comet a 1910

Final Pos. Comet Feb 1, 1910 11:06 G.M.T. =

21h 38m 34s + 3° 13′ ~~37~~ 22″

Wed Feb. 2, 1910
L.C. Obs. 6" W. Eq.

Comet a 1910
21 36 +4 2
26 49
5 13 w

2 53 27 5 17.0 w +4.1
5~~8~~4 17 5 17.5 w +4.1
G.M.T. obs = 54 45 5 18.0 +4.1
10 ~~4~~9.4 2 54.2 5 17.5 w +4.1 = mean
Dm + 1.4517

56 38 5 26.0 w +2.2
57 32 5 27.0 w +2.2
58 06 5 27.5 w +2.2
2 57 25 5 26.8 w +2.2

3 03 18 Comet a
Too cloudy for a transit, no stars anywhere near Comet

Uncorr. Ob. RA. Comet a = 21 36.7 & Dec +4.1
Diff +5.4 −0.4
1910 Corr Place Comet a = 21 42.1 & Dec +3.7
Uncorr Ob RA ★ = 21 30.6 & Dec +2.2
1910 Place ★ = 21 36.0 +1.8
Diff +5.4 −0.4

Ledgered there
Plotted " "

Fri. Feb. 4, 1900

L.C. Obs of Rec 6" W Eq.

Comet a 1910

2 1 43 +5.0
2 6 55
5 12 W Twilight too strong

3 8 12 Comet
3 8 55 * DM +4°.4753 (7.8) 21 42.8 +4 31
*= Zone No 7624 Comet is about 10' N of *.

3 9 41 Comet
~~3 9~~
3 10 22 star DM +4°.4753
Comet is 10' north of *
3 12 50 comet
3 13 31 star DM +4°.4753
Comet is 10' north of *

Setting on Comet

~~3 14 07~~
3 14 40 5 33 W ~~W~~ +5.2
3 15 19 5 34 W +5.3
3 16 00 5 35 W +5.2

Star = DM +4°.4753
3 17 18 5 36 W +5.1
3 17 59 5 36.5 W +5.1

Feb 4. 1910.

→ Star = Dm +5°.4910 (7.0) ($21^h\ 47^m$ +5° 17′)

3 19 8   5 31 w   +5 8
19 45   5 31 w   +5 f
20 27   5 32 w   +5 8

this star has a double ✗ north & fol.
by 0.5^m this double = Dm +5°.4913 & 4915

1910 pos of Zone No. 624 = 21 45 20.3 +4 47 84
− 41.7   +10
21 44 38.6 +4 57 54

Halley's Comet

0 55 +7.0   α 5.2 β   y α = Dm +7°.144 (9.1)
3 30   z β = Dm +8°.152 (9.3)
2 35 W   see Dm chart

Comet easily found & well seen
head about 4′ in diameter
& showing a tendency to a tail in a
n f. direction of about 6′ in length

2 47 W
+ 0.55
3 42

SS Cygni 213843 at 9.9

3 44
+ 434
6.11 W.

Sun Feb 6, 1910

~~R. C. Obs~~

Comet a 1910

3 16 8 Comet ~~Transit wires~~, ~~not set properly~~

3 16 56 ★

Comet 1.7 south of star

Setting on Comet

Passumed

3 16 35 5 33 w +6.4

Setting on star

3 18 53 5 27 w +6.7

Comet 1' South of ~~DM+ 6. 4917~~ 5. 4893

1910.0 Decl. of DM ~~+6. 4917~~ +5.4893

~~+6 45 27 +5 57 47~~
~~– 1~~ –1
~~+6 14 27 +5 56.47~~
+5 58.4

Comet 1910.

3 29 59 Comet

3 31 16 Star = DM+6° 4919 (8.5)

3 32 31' 30" Comet

3 33 53 Star DM+6° 4919 65

Comet 1.4 south of star.

3 34 28. 5.49 W +6.4 setting of Comet

1910.0 Pos reference ★ = 21 49 28.00 +6 26 21.2
– 1 20
21 48 8

Feb 6, 1910.

Comet A. 1910

3h 40' 28."50" Comet: faint star, slightly N+f.
3 4 ~~0~~ 06
3 41 31 faintest " comet N+f.
3 41 56.50 Reference star of previous obs.
3 4

Comet 3 47 4 +6.4 6.02 W.

Star. 3 48 15 +6.8 6.02 W.
" 3 48 54 +6.7 5.57 W
Setting on D.M. +5° 49/10
3 52 31 +6.0 6.02 W
3 53 15 +6.0 6.03 W

Comet 3.55 Est. about = star brightest N+f

S.T. = 4.17.40 at 6:52 00 E.W.T.
S.S. Ggm 21 38 43 Est 10.2
28 00

4.01
+43.5 ~~W~~

+6.27 W

L. P. P to here

Feb 10, 1910 Thursday

L.C. Ob Miss C. Searle Rec 6" W Eq

B 236 3 42 9 at 3:42:30 = Frod. 1327

B 236 4 13 0 at 4 13 21 = Frod 1327
4 13 47.6 at 6 32 05 = ~~B~~ Ballou 103

Comet a 1910
21 57 +7.8
27 45
5 ~~9+~~ W
54

s m h m s
Comet ~~40 52~~ 3 51 40
a.G. = 11071 * ~~56.57~~ 53 56 57 = Dm +7.4779 (5.8)
a.G. = 11080 * ~~56. 57~~ 5~~4~~ 27 Dm +7.4784 (8.2)

Comet .6 of small division south of 1st star.

Comet 55 3 56 55 *
a.G. 11071 * 15 59 15 +7.4779 (5.8)

wires dimly seen.

Comet .6 of division So. of bright star

∴ Comet = 7' South of +7.4779 (5.8)

*
1st wire .5 4 1 7
2d wire 5.6 4 1 56
3d wire 25 4 3 25

~~F~~Feb. 10, 1910

Comet	4	4 10	6.13 W	+f. 1	
~~✱~~	4	5 00	6 12 W	+f. 2	= ~~7~~ 0.4779

Dist between narrow wires = 12′ 8″
" " wider " = 22′ 3″
" " extreme wires = 34′ 11″

at 11h 11m G.M.T. comet ~~fol~~ prec A.G. 11071 by 2m 17s and is 7′.3 South of it.

1910.0 Pos ✱ =	21	54 6	~~57.02~~ 41.28	+7	49	27.8
Δ☄	✱	−2	17		−7	17
1910.0 Pos ☄	21	54	24	+7	42	11

Friday Feb 25 1910

L.C. obs 6" Wray JD 18728

Halleys Comet

ε = +7.99 (f.d)

η Ω = +7.99 (f.d)

0 34 x > .6		5 26
5 12		4 53 W
4 38 W est ε 3.0 η		x 8 2
ο Ceti 02 44.3 est 8.9		
5 44		3 34 W
3 30 W		5 46
		−3.3

2

—

—

L. P. P.

Thursday Mar 3. 1910

LC-Obs

Halleys Comet

Est comet = ? α 5. 2 δ see Dm. chart

~~Ca brightest star same R.A. as Comet but 0.4 field north of it~~

6 25

5 - 57 W

+ 8.03

Dm + 8°.64 (7.5) =	α approx	$0^h\ 24^m$	$+8°.4$	approx	7.0 = 7.29
Dm + 8.80 (7.9)	δ "	0 29	$+8°.1$	"	7.82

1 LPF.

Fri. March 4, 1910

L.P. Obs. J.D. 8735   6"

Halley's Comet

HA $5^{h}10^{m}$ ST $5^{h}39$ Dec +8.2

7 08 est 6" = λ 3,3 μ

Comet faintly seen in F.L.

X Ceti (031401) est 8.7

3 3w
6 16

—1 2

= L.P.P.

Omitted by mistake

L. C.

Mar. 7, 1910 Monday

R.C. Ell 6" W Eq 8738

Halley's Comet λ 2,5 μ

6 17
5 51 W
+8.2

Too low in haze to be seen
in Fil G.

! L.P.P.

Tue. Mar 8. 1910

L.C. Obs 6" W.Rg. 87^{3}9

T Urs Maj 123160 est 7.7

9 25

S Urs Maj 123961 est 10.6

RS Urs Maj 123459 est b 4 4 e =9.6

$\frac{3}{—}$ $\frac{49}{30}$

L. P. P.

Wed. Mar. 9. 1900
L.C. Obs J.D. 8740 6" W. Eq.

S And 001828 est c2,2d

629
6 11 W

6 33
6 18 W

a6b2c5d4e

+29.2

T And 001726 est <12.0

6 35
6 22 W

+27.0

o Ceti 021403 est 8.8
636
4 22 W

6 39
4 26 W

−3.2

R Ceti 022000 Est 9.8
640
4 20 W

6 4~~4~~3

4.25 W.
−0.2

3 52
1 1
4 34 L.F.P

Fri. Mar. 11. 1910

L.C. Obs. 6" Wg. 8742

Halley's Comet

Too low to observe

Some haze here

Mon. Mar 21, 1910

LC Obr JD 8752 FEG

8 35 RZ Cas 023969 est a 4, 0 a' -2:47 .117

8 48 " " est a 4, 1 a' -2 34 -.107
9 06 " " a' 1, 3 b -2 16 -.094

est comp ~~x~~2 a 5 a' 5 b 4 c 3 d' 3 d'' 4 e

β Pers 023140 est a 3, 2 b eye est

8 53 a 6 b 3 c 2 d 3 e 4 f ~~g~~ 2 h 1 k 4 l 4 m

k l m est in FEG.

λ Taur 035512 est Var a 1, 2 b

8 57 a 2 b 1 c 2 d 3 e 4 h 1 g 2 h

R Can Maj 071415 est a 2, 1 b

9 02 a 3 b 2 c 3 d 3 e 3 f

look up g

η Gem est Var a 2, 2 b
9 04 " est Var b 2, 1 c
9 05

a 3 b 2 c 5 d 4 e

Mar. 21, 1910

RT Aurig 062230 est ~~Ptg~~ of Var. = C 2,2 d

9 10 a > b 3 C 3 d 3 e 2 f

RZ Cass 023969 est ~~Ptg~~.

9 27	a' 3, 1 b		-1 55	-.080
9 44	b 1, 3 c		-1 36	-.067
10 00	b 3, 1 c	copied from memoranda Mar. 22, 1910.	-1 22	-.057
10 35	d' 2, 2 d		-0 47	-.033
11 00	d' 2, 2 e		-0 22	-.015

14 66

1 L.P.B.

37 71

Sat. Mar. 26, 1910

at home

L.C. Obs   F.G.   J.D. 8757

Moon bright

u Herculis 171333

		G.M.T.	Phase
10:03	d 2, w 3	.627	.132
10:18	d 2, w 3	.637	.142
10:30	d 2, w 2	.646	.151
10:56	~~d~~ w 1, 0 d	.664	.169
11:09	w 0, 1 d	.673	.178
11:29	1 w, 1 d	.687	.192
11:34	e 3, 1 d, 0 w	.690	.195
11:55	e 3, 1 d, 1 w	.705	.210
12:16	e 2, 2 d, 2 w	.719	.224
12:22	e 2, 2 d, 1 w	.724	.229
12:41	e 2, 2 d, 2 w	.737	.242

Campbells $6^2 \times 8^2$ Camera exposed lumiere plate on Moon exposure begun at 10:28.5 ended 10:33.5 E.M.T.

Devel 6^m in Seeds M.ff. Powder devel. 4g 42

11 77

= 71

L. P.

Sat. April 9, 1910

L.C. Elb. J.D. 8771

Halley's Comet.

Comp R.A. = $0^h\ 0^m$
" Dec = +7°.9

∴ Comet rises 17:31 S.T.
or " " 16:05 E.M.T.

at 17.50 S.T. nothing ~~visible~~ seen in FI-G or the 2½ inch telescope of the Comet.
Twilight now too strong to see anything than 4th magn. in region near where Comet ought to be.

γ Pegasi well up & well seen till eclipsed by bank of clds.
A heavy bank of clds just below region of Comet.

Troublesome clds about region all the time.

17:57 γ Pegasi still well seen but nothing else in this region or that of Comet

Tues. April 12, 1910

L.C.Obs. 4" Comet Seeker.

Looked for Halley's Comet.

16 20 GMT. Found altho difficult in strong twilight.

Comet about equal to HR 9093
decidedly fainter than H.R. 9072

4" C

HR 9093 = Dm + 7.5121 = magn. 5.78
HR 9072 = Dm + 6.5227 = magn. 4.03

∴ Est. comet = 5.4

16:30 Comet no longer seen.

Wed. April 13, 1910

L.C. Obs. 4" Comet Seeker

Halley's Comet

Comet found, altho bothered by clds in identification

16 07 est comet 2 (5.8) = est 5.6

16 20 Twilight too strong & clds near.

Wed. April ~~14~~ 20 1910

L.C. Obs. ~~4" Comet Seeker~~

Halley's Comet

F.G.

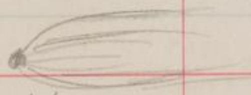
15 40 ξ Pegasi 4, 4 53 Pegasi 4.7 / 4.3 / 4.5

15 45 Tail about 1 ½ degrees long

15 50 Naked eye seen comet.

15 55 Still seen with eye.

16 05 Comet still seen with F.G.



1 ½ degrees long

16 10 Still seen F.G.

April 26, 1910

Tues.. ♃

Comet Halley

17:45 S.T. Comet seen in F.G.
but clouds near
=15:$\overset{1}{\cancel{2}}$0 EMT.

15:$\overset{1}{\cancel{2}}$5 E.T. Seen with N.E.

15:$\overset{1}{\cancel{2}}$9 Tail 4 degrees long in F.~~X~~G.

15 $\overset{2}{\cancel{3}}$4 Comet decidedly > star in Pisces F.G.

15 2~~3~~5 Comet 3 > ξ Pegasi. F.G.

15 $\overset{2}{\cancel{3}}$8 Comet 5 > ξ Pegasi N.E. ξ is
now about 12 degrees to left
of Venus & 3 degrees above horizontally

15 $\overset{3}{\cancel{4}}$3 Comet 4 > γ Pegasi N.E. which star
is only about 7° dist and nearly as
same ~~altitude~~.

15 $\overset{4}{\cancel{5}}$5 Comet's tail less marked in dawn than ~~at~~ when
~~first~~ seen. at 15:29; altho it still is a ~~lot~~
little > γ Pegasi. = Algenib = 2.87 ∴ Com = 2.5

$\overset{15\ 50}{\cancel{16\ 05}}$ Comet still seen N.E.

16 00 Comet still seen N.E ~~altho~~ sky bright

Thurs April 28, 1910

L.C. Obs.

Halley's Comet.

15 h E.M.T. Comet just barely seen in F.G.
enough to surely identify it & show
a tail. No est. of brightness, size of tail, or
diam of head could be made

15 30 Too cloudy to see Comet now

Thurs ~~Oct~~ May 5, 1910

L C Obs

E.M.T. Halley's Comet

2 00 Rather cldy, except near region of Comet

2 30 Comet seen in F. G.

2 36 " " N. E.

3 18 Est ☄ α Persei 5, 6 γ Pegasi eye

(1.90) 5, 6 (2.87) = 2.34

3 10 Tail now 11 degrees long NE.

3 10 " " 12 " F G.

3 20 Head of Comet estimated as 50" of arc. as seen in 4" Seeker measuring it longitudinally.

End of Tail = 2 to 3 degrees wide N. E

On measuring the tail as marked off on ~~the~~ atlas this am. I now make it 13 to 14 degrees long.

L.P.P.

Thurs. May 12, 1910

5" L.C.Obs

23:10 to 23:30 Searched for Halley's Comet in 6" but not seen, altho ~~Halley~~ could be easily seen Venus

L C

May 13, 1910
6" Wrg L.C. Obs

Halley Comet

9 30	1 6	+13.2	
	1 10	not found.	
	0 6 w		

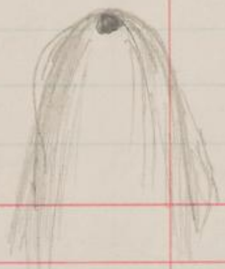
May 14, 1910 Sat

L.C. Obs.

Halley's Comet

15 15 Seen F.G. & N.E

Sky too bright to est. or see much tail.
Nucleus quite bright and Coma
quite wide



Followed with F.G. & Eye until 15:50

15 25′ Comet brighter than 1st mag. but
no good comp. stars near by to allow
a good est. to be made

May 19, 1910 Thur
L C Ole
6"

Halleys Comet

4 35
7 40 11 25 Not seen
6 50

4 35
11 33
6 58
7 03

2 45 to 3 00 See Schwings for glow in Eastern Sky
wider at Sunward End tapering at opposite

May 20, 1910 Fri.

L.C. Obs 6"

Halleys Comet

Comp't Pos 5 35 +18.9 at 7:00
5 38 +18.8 at 8:00
5 40 +18.7 at 9:00

5 36 +18.8
11 24

5 48 W

5 50 W at 11:22
6 00 W at 11:32

5 35
5 38 +18.8
11 58

6 20 W
6 24 W +18.5

S 20 Not a sign of the Comet seen.
Clouds too thick all the time

May 24, 1910
L.C. Obs. 6" W. Eq.

Halley's Comet

8 28.6 +9 27 Poz. 24.5^a
8 49.8 +7 45 Poz 25.5
21.2 102

Hourly motion, 1^m per hour RA
" " 0.4 per hour Dec.

8 00 : 8 30 +9.4
9 00 8 31 +9.3
10 00 8 33 +9.3
11 00 8 33 +9.2

8 30 +9.4
12 05
3 35W +9.1

7:47 PM 12:11 S.T. = 3 46 H.a. +9.1 Dec,

7 50 Naked eye visibility

View in telescope see paper I

8 22 Tail 5° N.E. reaching beyond ζ Hydrae

8 25 Tail 7° N.E.
clouds prevent further tail being seen.

May 24, 1910.

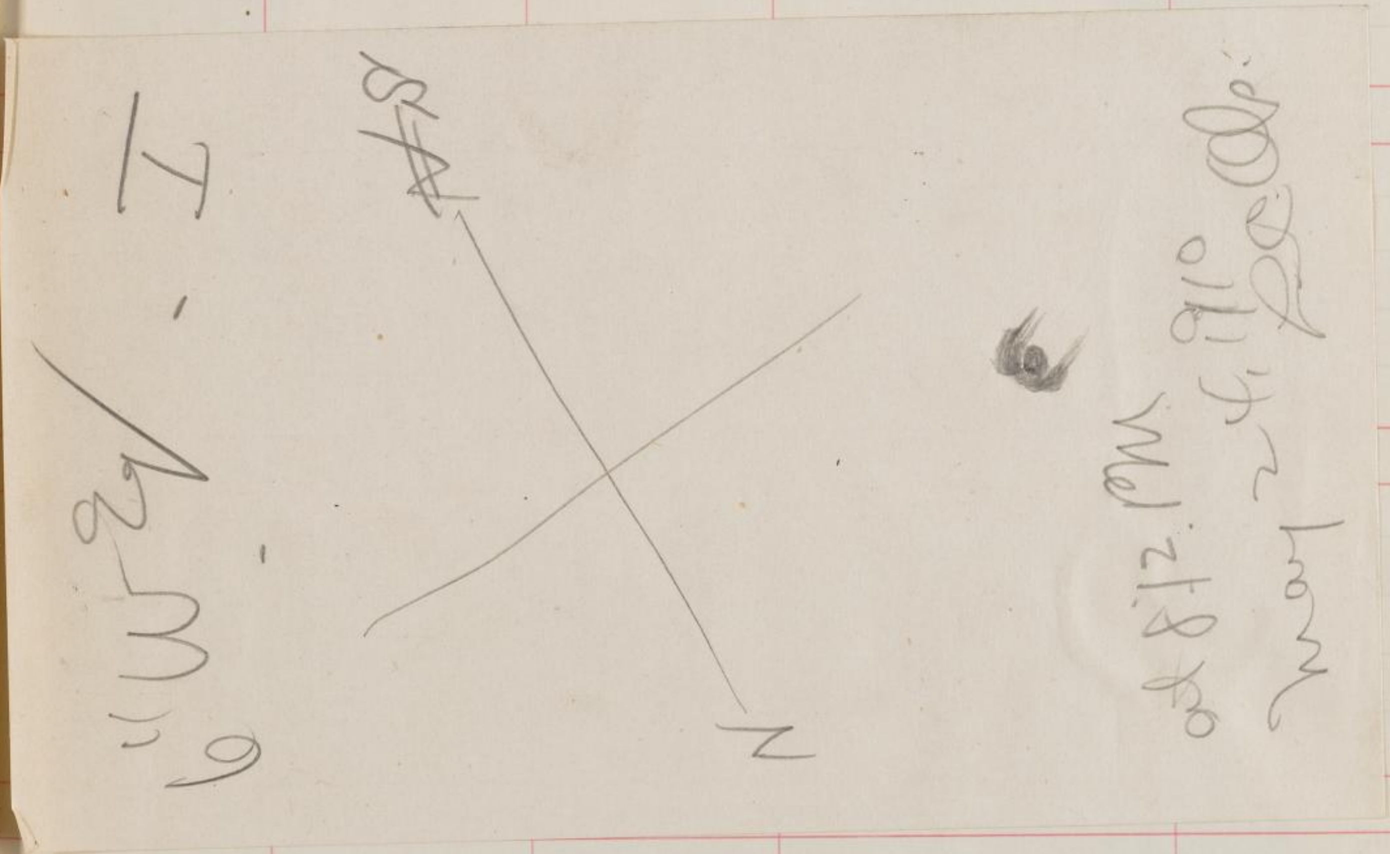
Comet = to β Corvus in brightness

9 05 lower left star of Trapezium of Corvus

Comet 4 > Polaris

Comet 3 < Castor (α Gem)

2.84
1.72
1.88
3)6.44
2.15



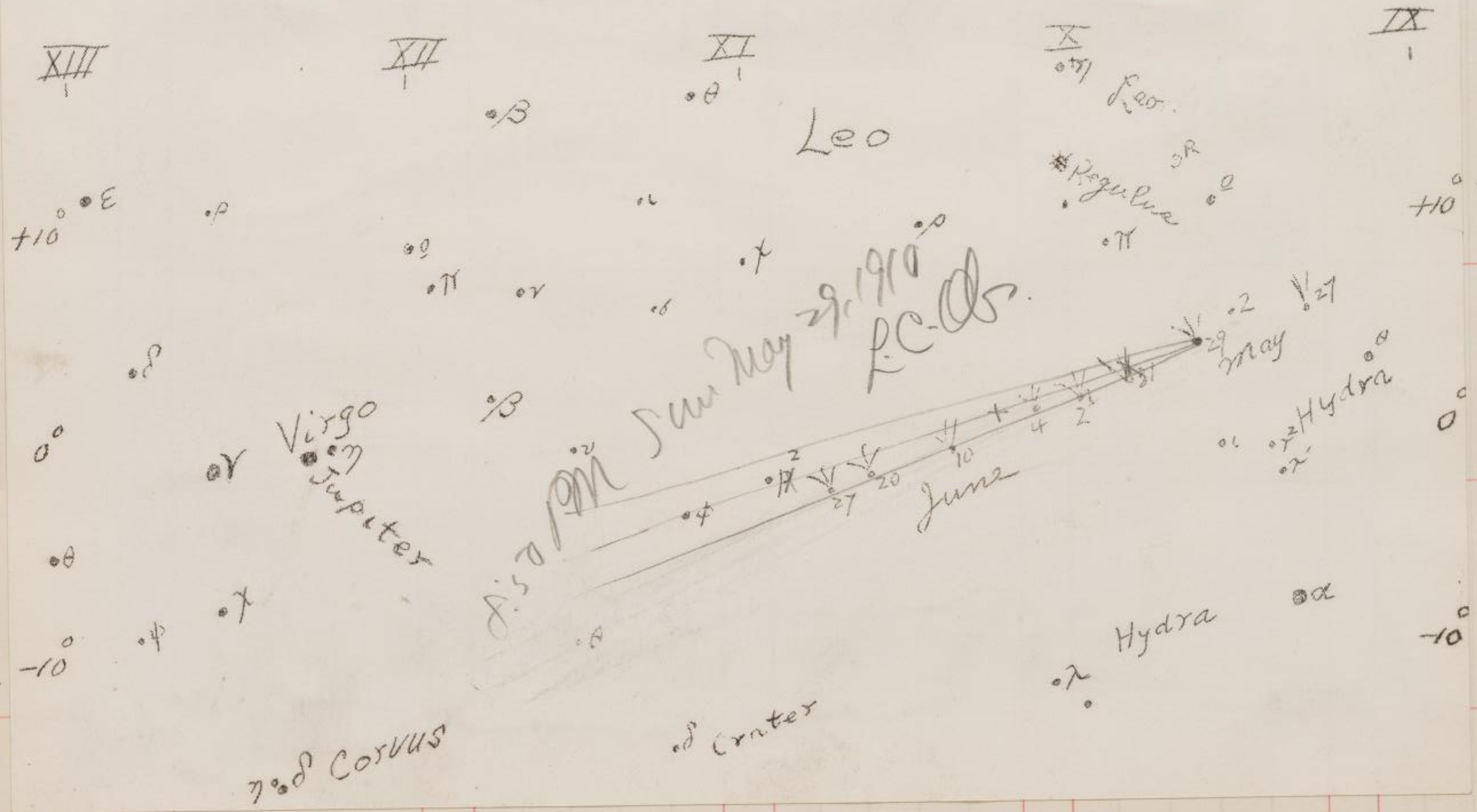
May 29, 1910
Sunday / L.C. Ob.

Halley's Comet
est γ ~~Corvi~~ Corvi 2 Comet
Comet 3 ε Corvi
8:30 pm = 2.94

Comets tail est 30°
9 00 PM.

Harvard College Observatory.
Cambridge, Mass.

Path of Halley's Comet
1910 – May – 27 to – June 27



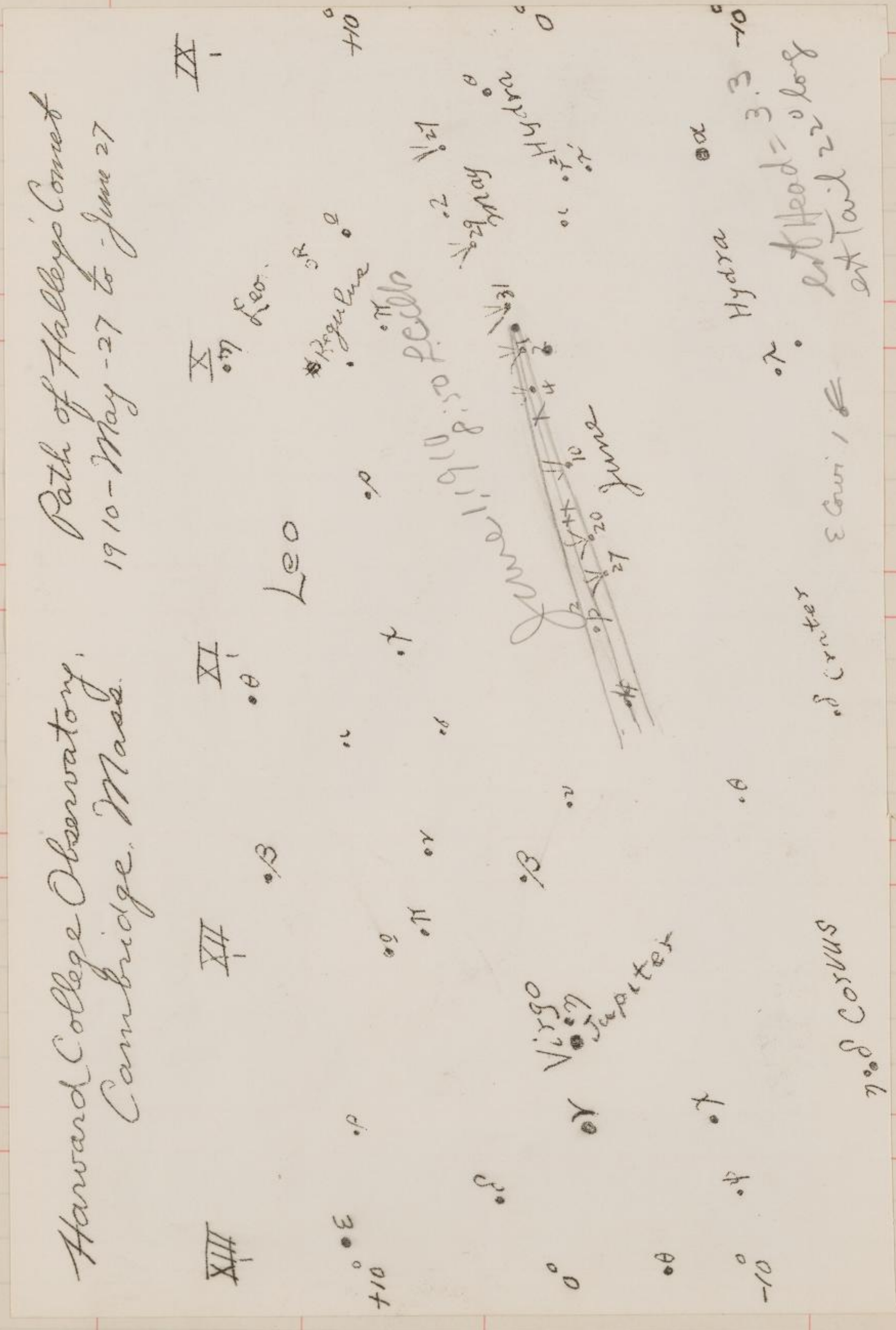
8:30 PM Sun May 29, 1910 L.C.-Obs.

Ephemeris Halley's Comet

	R.A.	Dec.	log r	log Δ
June 29.5	10 45 57	−2 36 47	0.173	0.192
July 3.5	10 49 24	−2 57 48	0.190	0.229
7.5	10 52 41	−3 18 12	0.206	0.262
11.5	10 55 50	−3 38 13	0.222	0.292
15.5	10 58 53	−3 58 16	0.237	0.319
19.5	11 1 51	−4 18 18	0.251	0.344
23.5	11 4 46	−4 38 22	0.265	0.367
27.5	11 7 39	−4 58 32	0.278	0.388
31.5	11 10 27	−5 19 2	0.291	0.408

Wed. June 1, 1910

L.E. Obs.



Harvard College Observatory, Cambridge, Mass.

Path of Halley's Comet 1910 - May 27 to June 27

June 1, 1910 8h 50m L.E.Obs.

est Head = 3'.3

est Tail 2°.2 long

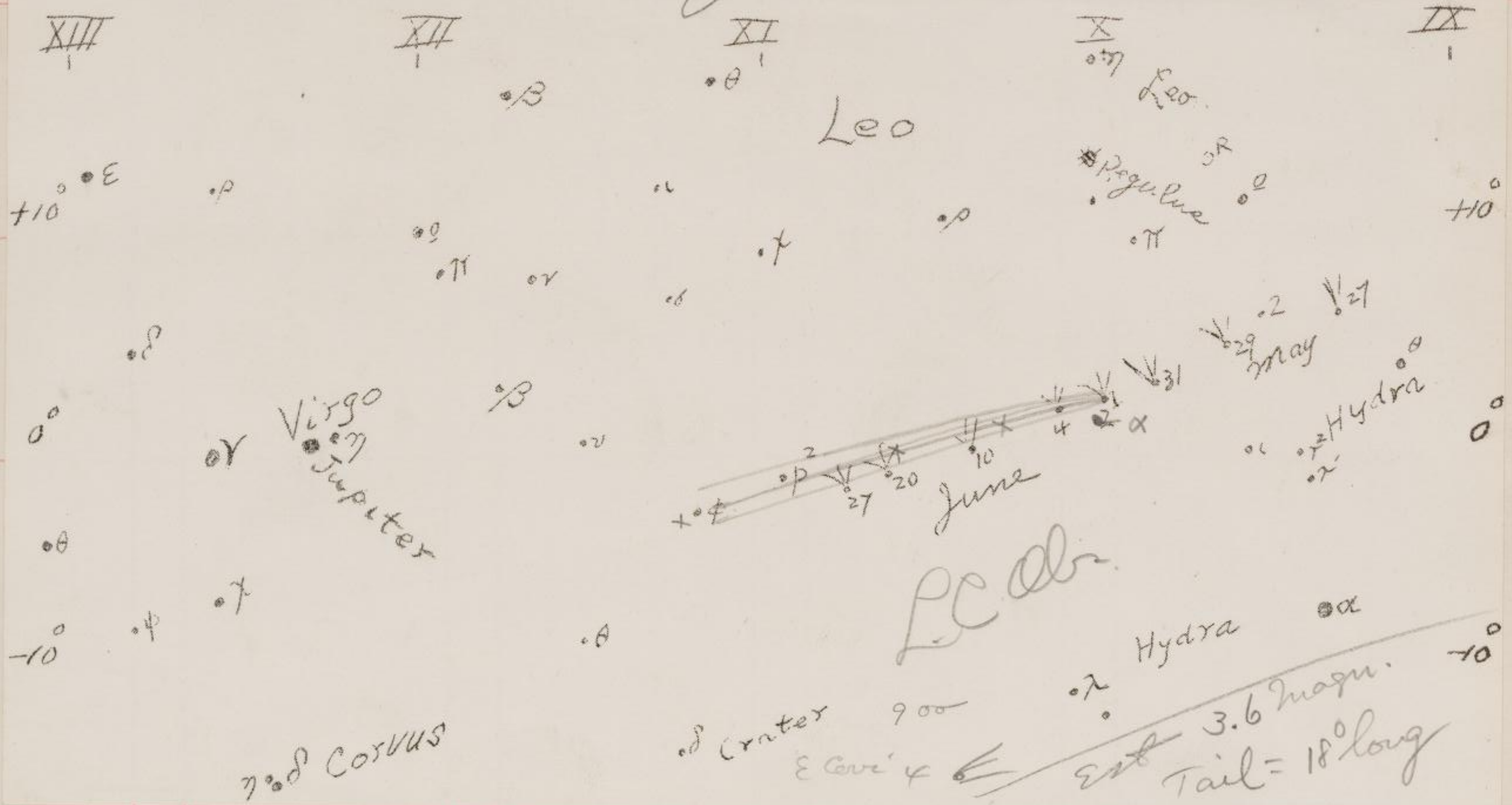
ε Corvi 1 ☄ 3

Thurs June 2, 1910 LCells

Harvard College Observatory,
Cambridge, Mass

Path of Halley's Comet
1910 - May - 27 to - June 27

June 2, 1910

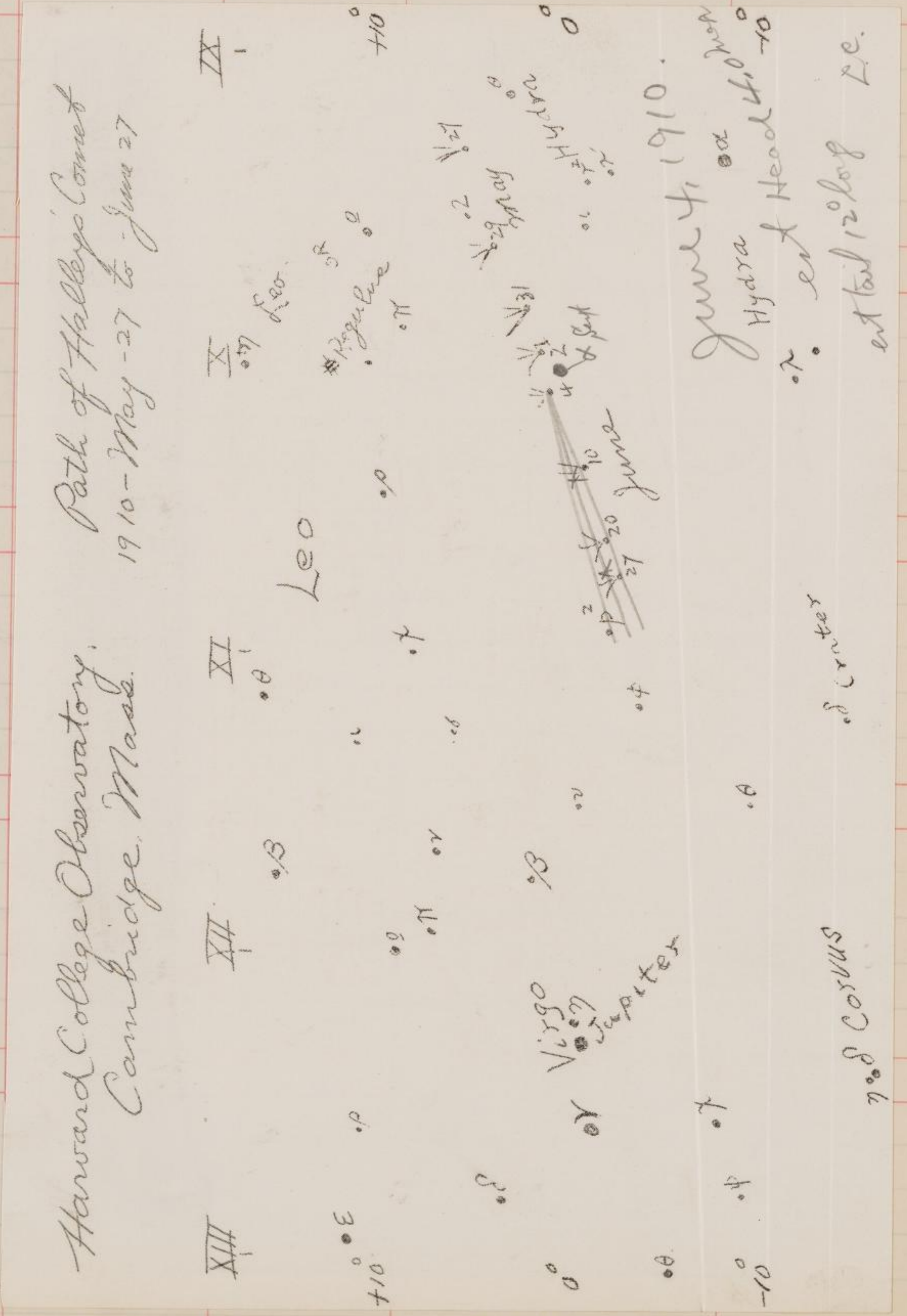


LC Ob

Est 3.6 magn.
Tail = 18° long

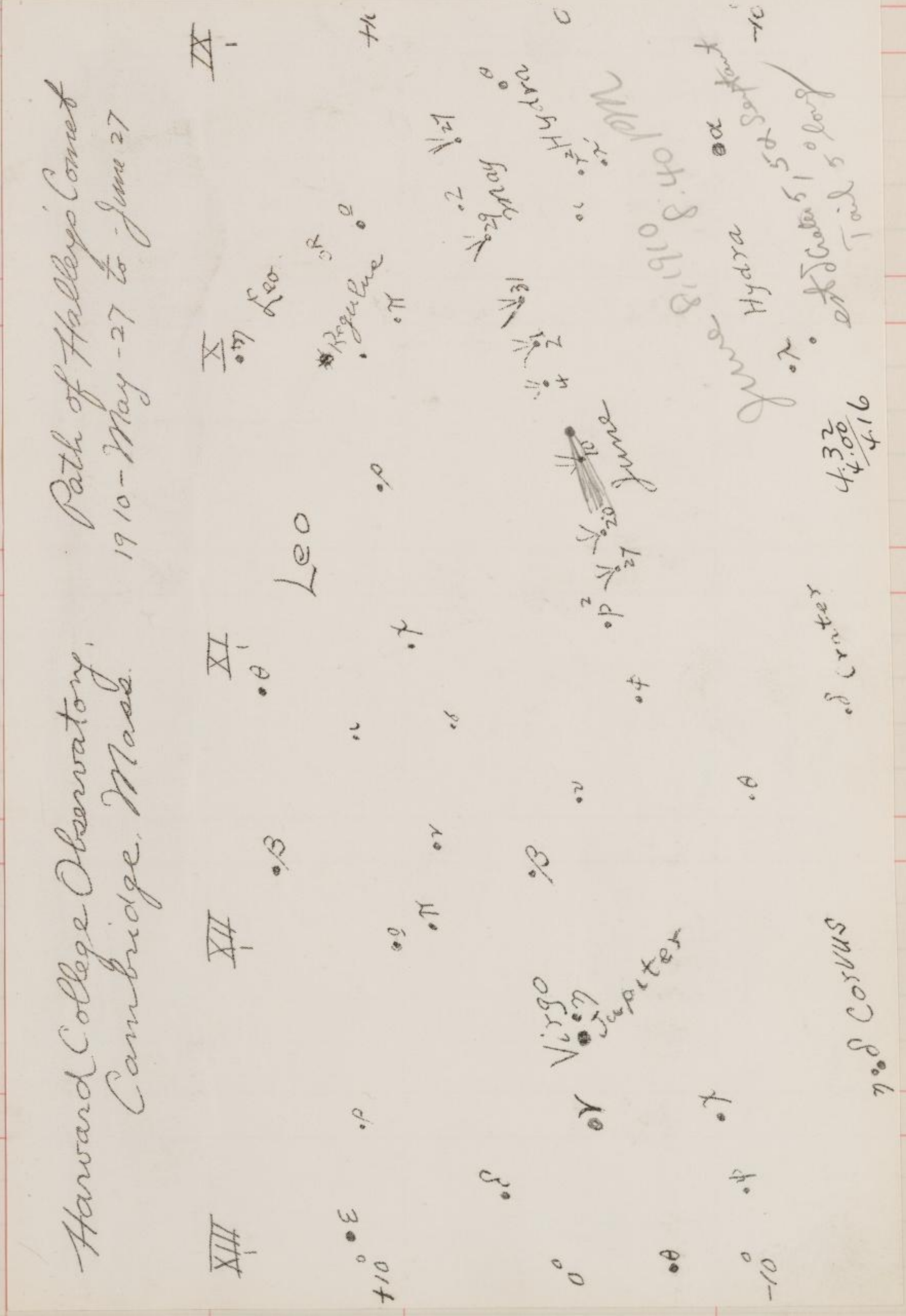
Sat June 4, 1910

L.C. Obs.



Wed. June 8, 1910

L.C. Obs.



Harvard College Observatory, Cambridge, Mass.

Path of Halley's Comet 1910-May-27 to June 27

Thur June 2~~X~~3, 1910

R.C. Obs 6" W Eq

Halley's Comet

10 40 −2.0
14 37
3 57 W

Comet est as α 3.3 β
α = −1°.2435 (8.5) β = −1°.2436 (9.3) 14 50
see SDM chart 51 for ident. 4 14 W

8 32 — Comet quite faint
Coma somewhat extended −2°.3
but can not pick out anything that
could be called surely the tail
~~Th~~ Nucleus more condensed in this 6"
than in 24" last observing night.

Wednesday June 29, 1910

L.C. observer. G.M. 8852. L.F. Rec. 6" W. Equi

Halley's Comet 1046 - 2 37

Est of Prof Wendell's Comp. Stars b, c.

reduced magn c = 8.05

Twilight being strong couldn't get d.

1023 + 0 Est of Comp p 7 β 4 γ

γ being Prof. Wendell's Comp Star

reduced magn γ = 7.98

Halley's Comet 1048 - 1.5 Est γ 7 Comet 4 Δ.

see S. D. Chart 15, 24 for identification of Comparison Stars 4.43 W

Est. mag of Comet = 9.8 ± − 2.8

8 40

γ 7 Comet 4 δ

$\gamma = -2^{\circ}.3228$ (9.0)

$\delta = -2.3231$ (10)

Thurs June 30, 1910

6" W Eq. L C Ob 8853

RX Virg	~~12~~ 11 59 05 15 53 3 54 W	est 9.0	3 58 W 15 54 −5.6
RW Virg	12 02 06	est 7.3	15 55 3 57 W −6.5
T Virgin	12 09 05	est 12.0	15 56 3 51 W −5 8
R Corvi	12 14 18	est 11.4	3 51 W 16 00 −18 9
T Ursa Maj	12 31 60 16 01 3 30 W	est 12.6	16 03 3 34 W +59.6 ~~+60~~

June 30. 1900

S Urs Maj	123961	est 7.8	
			16 04 3 26 W
			+61.0
RS Urs Maj	123459	est <12.2	
U Herc	162119	est 12.0	
	16 05 t 0 16 E		0.8 E 16 10
			+19.6

L. P. P.

7
1
—

Monday July 11, 1910

L. C. Ob. Easton N.H. 5"

Telescope set up today and circles partly adjusted tonight.

R Coronae 154428 est 7.0

17 10
1 30 W

+26.0

SS Cygni 213843 est 11.8

17.25
4 10 E

+45.8

2

L. P. P.

Wed. July 13, 1910

L.C. Obs   Exeter N.H.   5''

8 00 Partly cldy to much to do much

SS Cygni 213843 est 120

16 28
5 13 E

Clds nearby

+460

1 L. P. P.

Thurs July 14, 1910 8867

5″

L.C. Obs Epsom N.H.

X Urs Maj	083350	<11.0	
alt low. in N.W.			16 15 7 52 W +46.0
R Coronae	115919 est	8.5	
			16 20 4 15 W +20.0
R Urs Maj	103769 est	11.1	
			16 26 6 00 W +68.0
R Coronae	154428	est 7.1	
			16 30 0 40 W +26.8
Y Draco	093178	est <11.6	
			16 38 7 5 W +76.2

July 14, 1910

SS Virg	122001	est 7.3	16 44 4 28 w +0 8
T Can Ven	122532	est 11.7	16 50 4 20 w +31.0
T Urs Maj	123160	est <12.0	16 56 4 20 w +60.0
S Urs Maj	123961	est 7.8	16 58 4 14 w +61 2
RS Urs Maj	123459	<12.0	17 00 4 21 w +59.0

July 14, 1910

RVirg	123307	est 9.3	17 10 4 60 w +6.8
RUVirg	124204	est 11.8	17 13 4 35 w +4.2
U Virg	124606	est 9.6	17 16 4 40 w +6.2
RTVirg	125705	est 8.0	17 22 4 20 w +4.8
RVVirg	130212	est <11.5	17 28 4 20 w −11.6

July 14, 1910

V Virg 132202 < 11.8

17 33
4 14 W

-2.0

R Hyd 132422 est 8.9

17 38
4 10 W

-21.8

S Virg 13$\overset{2}{7}$706 est 11.8

17 45
4 20 W

-5.8

Z Bootis 140113 est <12.0

17 52
3 50 W

+13.6

Z Virg 140512 < 11.8

18 00
4 0 W

* -12.0

July 14, 1910

SS Cygni	213843	est 12.0	18 05 3 33 E +46.2
R Oph	170245	est 7.4	18 10 1 8 8 W -15.6
T Urs Min	133273	est 9.4	18 20 5 0 W +72.2
R Can Ven	134440	est 9.1	18 28 4 46 W +40.0
U Urs Min	141567	est 8.6	18 35 4 20 W +66.0

July 14, 1910

S Bootis 141954 est 8.7

18 39
4 20 W

+53.0

V Bootis 142539 est 10.6

18 42
4 17 W

+38.9

R Bootis 143227 est 8.7

18 46
4 14 W

+26.8

U Bootis 144918 est < 12

18 50
4 06 W

+17.8

S Coronae 151731 est 10.6

18 56
3 45 W

+31.2

July 14, 1910

S Ursa Min	15 33 78	est 11.0	1902 3 30 w +79.2
X Coron	15 45 36	est 9.6	19 06 4 20 w +35.9
V Coronad	15 46 39	est 11 3	19 12 3 26 w +39.9
Z Coron	15 52 29	est 12.0	19 20 3 30 w +29.4

26
8

L. P. P.

Sat July 16, 1910

L.C. Obs J.D. 8869 5" Groton N.H.

RT Librae	150018	9.6 est	
			16 20
			1 20 w
			−18.8
T Librae	150519	<12	
			16 26
			1 22 w
			−19.2
Y Librae	150605	<12 nf	
			16 30
			1 24 w
			−5.2
S Librae	151520	11.1	
			16 32
			1 17 w
			−20.0
RS Librae	151822	est 9.8	
			16 40
			1 22 w
			−21.6

July 16, 1910

	RU Librae	152714	<12.0	16 45 1 26 W -14.8
	X Librae	153020	est 11.4	16 49 1 18 W -20.8
	R Librae	154715	<12.0	16 53 1 6 W -15.2
	RR Librae	155018	est 10.6	17 00 1 12 W -19.0
	Z Scorpii	160021	est 10.6	17 6 1 5 W -21.9

July 16, 1910

RZ Scorp.	155823	est 10.1	17 12 1 15 W -23.6
R Serp	154615	est 8.2	17 16 1 30 W +15.6
R Her	160118	<11.6	17 22 1 20 W +18.6
R Coronae	154428	est 6.8	17 26 1 44 W +26.8
SS Cygni	213843	est 11.8	17 30 4 12 E +45.6

10
5 L. P. P.

Sun July 17, 1910

L.C. Obs Groton Mass. JD 8870.

U Serp	160210	est 11.0	16 25 0 20 W +10.2
RU Herc	160625	est <11.5	16 31 0 28 W +25 8
R Scorpii	161122a	est <11.6	16 38 0 26 W −22 6
S "	161122b	est 11.3	
W Oph	161607	est 9.5	16 44 0 28 W −7.6
V Oph	162112	est 7.6	16 50 0 30 W −12 8

July 17 1910

SS Herc	162807	est 9.1		16 56 0 30 W +7.4
T Oph	~~16~~1615	<11.4		17 02 0 37 W -15.6
S Oph	162816	8. est		17 06 0 41 W -16.2
RR Oph	164319	est 8.2		17 12 0 26 w -19.8
RS Oph	174406	est 11.5		17 18 0 24 E -6.6

July 17, 1910

y Scorp	162319	est 10.0	
			17 24 1 0 W
			−19.9
Z Oph	171401	est 7 9	
			17 30 0 16 W
		~~20~~ 10 ρ	+1.2
		~~8~~ 3	

Wed July 20, 1910

LCObr Groton N.H. JD 8873

SS Cyg	213843	est 11.8	16 50 4 50 E +43.0
R Coron	154428	est 6.8	16 53 1 10 W +28.0
RZ Herc	183225	est 11.8	17 00 1 30 E +26.0
X Oph	183308	est 9.1	17 05 1 30 E +8.1
R Aquil	190108	est 8.5	17 11 1 50 E +8.6

July 20, 1910

U Lyrae 191637 est 8.9

17 20
1 58 E

+38.0

TZ Cyg 191350 est 10.0

17 26
1 49 E

clds nearby

+51.0

TY Cygni 193928 est 9.8

17 40
1.40 E

more cloudy

+28.9

Too cldy to continue

1800

Thurs July 28, 1910

L.C. Obs. Eastern M.T.-JD 8881

SS Cygni 213843 est 11.7

17 10
4 30 E

+43.0

R Coronae 154428 est 6.5

17 15
1 30 W

+28.0

T Camel 043065 est 11.2

17 21
11 10 E

+66.8

X Camel 043274 est 11.5

17 30
11 15 E

+75.2

S Camel 053068 est 9.2

12 0 E
17 38

+69.8

July 28, 1910

V Camel	054974	est 8 2	17 45 11 50 W +76.0
ST Serp	151714	est 10.0	17 50 2 35 W +14.0
U Herc	162119	est 11.4	17 56 1 30 W +19.0
S Herc	164715	est 7.8	18 00 1 15 W +15.6
RV Herc	165631	est 9.6	18 04 1 10 W +31.0

July 28, 1910

W Coron	161138	est <11.8	
			18 10 2 0 W +39.0
W Herc	163137	est <12.0	
			18 15 1 42 W +37.8
R Camel	142584	est 8.4	
			18 20 4 0 W +85.0
RY Oph	181103	est 8.6	
			18 26 0 17 W +3.2
SV Herc	182224	est 10.2	
			18 30 0 10 W +23.8

July 28, 1910

T Serpen 182306 est <11.7

18 36
0 15 W

+6.2

T Cass 001755 est 9.8

18 41
5 30 E

+54.8

Y Ceph 003179 est 10.1

18 50
5 40 E

+80.0

W Cass 004958 est 11.8

18 58
5 53 E

+58.8

S Cass 011272 est 11.3

19 5
6 9 E

+71.4

July 28, 1910

X Cass	014958	est 9.1	
			19 11 6 36 E +57.7
R Aurig	050953	est 9.5	
			19 20 9 50 E +52.2
RR Her	160150	est 8.1	
			19 24 3 24 W +51.0
~~RV Her~~ R Drac	163266	est 11.4	
			19 30 3 0 W +67.1

L. P. P. 21
3

(Tues) Aug. 2, 1910

L.C.Ols Groton Mass JD 8886

S S Cygni 213843 est 8.2

17 10
4 30 E

+43.0

R Coronae 154428 est 6.5

17 12
1 28 W

+28.0

S Urs Maj 123961 est 8.6

17 16
4 27 W

T Urs Maj 123160 N S <11.8
RS Urs Maj 123459 N S <11.8

+62.0

RS Herc 171723 est 9.8

17 21
0 6 W

+24.0

RT Herc 170627 est <11.8

17 26
0 22 W

+26.8

Aug 2, 1910

R U Oph	172809	est <11.8	17 34 0 5 W +9.6
RY Herc	175379	est 10.2	17 40 0 18 E +19.9
T Herc	180531	est 9.6	17 45 0 26 E +31.6
RY Lyrae	184134	<12.0	17 50 0 50 E +35.2
ST Sagitt	185512	est <9.8	17 55 1 1 E −11.8

Aug 2, 1910

Cleaned Lens (all cleaned)

RY Sag.	191033	est 7.0	18 13 1 0 E -35.0
χ Cygni	194632	est 6.0	18 16 1 34 E +33.0
S Lyrae	190925	est 11.4	18 22 0 49 E +26.0
RS Lyrae	190933	est 11.8	18 28 0 43 E +34.1
W Aquil.	191007	est <11.8	18 35 0 58 E -7.8

Aug 2, 1910

R Sagitt	191019	est 10.2	
S Sagitt	191319	<12	18 40 0 32 E
Z "	191321	<12	−19.0
TY Cyg	192928	est 9.8	18 46 0 45 E +29.2
RT Aquil	193311	est 11.8	18 50 0 45 E +12.2
RV Aquil	193509	est 10.2	18 56 0 42 E +9.2
X Aquil	194604	est <12	19 00 0 50 E 4.2

Aug 2, 1910

RR aquil	19 52.02	est 9.0	19 06 0 45 E −2.8
RS aquil	19 30 8	est < 11.5	19 10 0 46 E −8.8
SY aquil	20 02 12	est 10.8	19 15 0 49 E +13.0

Lens all dewed again

Have to quit.

19 30

17 L.P.
10

Thurs. Aug. 11, 1910

L.C. Obs. J.D. 8895 Exeter N.H.

8 00 Sky partly clear air very moist after heavy shower

	SS Cygni	213843	est 9.2	17 50 3 40 E +43.0
	R Coronae	154428	est 6.3	17 53 2 10 W +28.8
	S Bootis	141954	est 10.4	17 58 3 50 W +53.6
	R Can Ven	134440	est 8.6	18 02 4 16 W +40.0
	R Bootis	143227	est 9.4	18 06 3 38 W +27.0

Aug 11, 1910

R Ursae Maj	103769	est 11.7	18 14 7 32 W +68.0
T Urs Min	133273	est 90	18 20 4 46 W +71.0
U Urs Min	141567	est 8.3	18 26 4 10 W +66.2
S Coronae	151731	est 11 0	18 30 3 15 W +31.6
X Coron	154536	est 8.6	18 36 2 50 W +35.0

Aug 11, 1910

R Serpentis	154615	est 9.0	18 41 2 53 W +16.0
SS Herc	162807	est 10.6	18 46 2 16 W +7.0
V Camel	054974	est 8.6	18 52 11 0 E +74.9
SS Serpen	151714	est 9.1	19 00 3 45 W +15.2

Dew on objective prevents further obs tonight
clds also numerous
especially in the East

L. P. P. 14

Friday August 12, 1910

L.C. Obs. JD 8896 Exeter N.H.

SS Cygni	213843	est 9.6	17 35 4 5 E +43.2
RT Librae	150018	est, 10 4	17 40 2 45 W -18.0
T Librae	150519	< 11.6	17 43 2 40 W -19.2
S Librae	151520	est 9 6	17 50 2 38 W -21.0
RR Librae	155018	est 11.4	17 56 2 8 W -18.8

Aug 12, 1910.

RZ Scorp	155823	est 109	18 02 2 5 W -23.0
U Scor	160210	est 11.6	18 8 2 8 W +10.0
R Scorpii	161122a	est <11.8	18 12 2 0 W
S Scorpii	161122b	est <11.8	-22.2
W Oph.	161607	est 101	18 16 2 0 W -6.8
V Ophiuchi	162112	Est 7.1	18 20 2 2 W -12.2

Aug 12, 1910

U Herc	162119	est 10.7	18 26 2 8W +19.6
R Drac	163266	est 11.7	18 30 2 0 W +67.0
Z Coron.	155229	est 10.9	18 36 2 48 W +30.0
RR Oph	164719	est 8.7	18 40 2 0 W -18.9
S Herc	164715	est 8.5	18 46 2 0 W +15.2

Aug 12, 1910.

RV Herc	165631	est 10.6	18 50 1 55 W +32.0
R Oph	170215	est 7.8	18 56 1 55 W -15.2
RT Herc	170627	est 11.3	19 00 1 56 W +27.4
Z Oph	171401	est 7.6	19 08 1 58 W +1.4
RY Herc	175579	est 9.3	19 15 1 23 W +79.8

Aug 12, 1910

T Herc	180531	est 8.6	19 20 1 18W +31.2
RY Oph	181103	est 8.0	19 26 1 18W +3.6
SV Herc	182224	est 9 3	19 30 1 10W +25.0
X Oph.	183308	est 8.6	19 38 1 8W +8.2
R Aquilae	190108	est 6 8	19 44 0 46W +8.0

L. P. 2^{3}_{3}

Mon Aug 22, 1910.

L.C. Obs. Exeter N.H. 8906 5"

SS Cyg.	2138K3	est 11.8	17 50 3 50 E +420
R Coronae	154428	est 6.3	17 52 2 10 W +28.6
R Urs Maj	103769	est 11.7	17 56 7 25 W +69.9
RS Urs Maj	123K59	<12	18 02 5 30 W +600
T Urs Maj.	123160	11.6	18 04 5 35 +612

Aug 22, 1909

S Urs Maj	123961	est 8.8	18 07 5 25 W +61.8
T Urs Min	133273	est 9.4	18 12 4 45 W +74.0
R Can Ven	134440	est 8.3	18 18 4 38 W +41.0
U Urs Min	141567	est 8.7	18 25 4 18 W +68.2
S Boot	141954	est 11.2	18 30 4 12 W +55.0

Aug 22, 1910

~~α~~ V Bootis	142539	est 110	
			18 36 4 15 W +40.0
R Camel	142584	est 8.6	
			18 42 4 23 W +85.2
R Bootis	143227	est 10.1	
			18 46 4 15 W +28.2
S Urs Min	153378	est 10.2	
			18 52 3 13 W +79.8
U Herc	162119	est 10.5	
			19 00 2 40 W +19.4

Aug 22, 1910.

R Draco	163266	est 11.8	
			19 10 2 33W +67.5
S Herc	164715	9.3 est	
			19 16 2 30 W +15.8
RV Herc	165631	est 11.3	
			19 22 2 29 W +31.9
RT Herc	170627	est 10.2	
			19 30 2 22 W +28.3
Z Oph	171401	est 8.2	
			19 36 2 25 W +1.9

Aug 22, 1910

T Herc	180531	est 7.6	
			19 40 1 38 w +32.0
RY Oph	181103	est 8.8	
			19 44 1 33 w +3.9
SV Herc	182224	est 9.8	
			19 53 1 30 w
		22 1 L.P.P.	+25.0

Fri Aug 26, 1910

L.C. Obs. JD 8910 Groton N.H.

SS Cygni	213843	est 12.0	17 55 3 45 E +42.5
SS Herc	162807	est 11.6	18 02 1 37 W +8.0
S Oph	162816	est 8.6	18 07 1 36 W
T Oph	162815	<11.8	✱ −15.8
RR Oph	164319	est 8.6	18 12 1 26 W −19.8
R Oph	170215	est 9.1	18 18 1 13 W −16.0

Aug 26, 1910

RS Oph	174406	est 11.8	18 25 0 28 W -6.6
R Aquil	190108	est 6.6	18 31 0 30 W +8 6
RY Sagitt	191033	est 7.3	18 36 0 38 E -34.0
TZ Cyg	191350	est 10.2	18 40 0 36 E +51.0
SY Aquil	200812	est 11.6	18 46 1 19 E +13.0

Aug. 26, 1900

R Delph	201008	est 10.1	
			18 50 1 23 E
			+8.9
R Vulpec	205923	est 8.6	
			18 56 2 8 E
			+24.0
R Peg	230110	est 11.1	
			19 00 4 0 E
			+11.2
S Aquil	200715a	est 10.8	
			19 8 1 0 E
			+16.0
RU Aquil	200812	est 9.5	
			19 12 0 58 E
			+12.9

Aug 26, 1910

SX Cyg	201130	est 12.0	
			19 20 0 50 E + 31.0
Z Delph	202817	est 9.5	
		17 L. P. P	19 28 1 0 E +17.4

Mon. Oct. 17, 1910

L. C. Obs 6" av. Eq. JD 8962

R Coronae 154428 est 9.6

7 25

21 14
5 30 w

21 23
5 39 w

+28.4

X Coronae 154536 est unseen 11.3

7 28

21 27
5 44 w

+36.5

7 33 V Coron 154639 est 11.0

21 29
58 43 w

21 32
5 45 w

+39.9

7 36 RR Herc 160150 est 8.5

21 33
5 32 w

21 35
5 33 w

+50.6

7 38 X Oph 183308 est 8.7

21 36
3 3 w

21 37
3 4 w

+8.2

Oct. 17, 1910

7 41	Z Aquilae	200906	est 11.0 Var	susp only 21 40 1 31 w −6.7
7 44	RT Capric	201121	est 7 3	21 43 1 32 w −22 2
7 47	V Aquar	204102	est 9.0	z 21 46 1:3 w +17
7 49	T Aquar	204405	est 7 5	21 48 1 3 w −6 2
7 51	RS Aquar	210504	est 10.5	21 50 0 45 w +48

Oct. 17, 1910

7 53	RR Aquar	210903	est 10.7	
				21 52 0 43 W −3.6
7 56	Z Delph	202817 2153 1 25 w	est 11.6 suspiciously	21 55 1 27 W +16.8
7 58	S Delph	203816	est 9.6	21 57 1 18 W +16.3
8 00	T Delph	204016	est < 11.5	21 59 1 10 W +15.8
8 03	R Vulpec	205923	est 9.6 (Var or m?) Var not. see Ob of plate date	22 02 1.2 W +22.7

Oct. 17, 1910

8 05 T Cephei 210868 est 6.3

22 04
0 55 w

+68.4

S Cephei 213678 est
2206
0 30 w
pier interferes

8 13 SS Cygni 213843 est 11.0 22 11
2209 0 33 W
0 31 W

+42.5

Moon too bright to continue with
8 20 advantage

17 L.P.P.

~~All~~
All ledgered
plotted Oct 24, 1910
Posted
to Leon.

Mon Dec. 12, 1910

L.C. Abc $\overset{6}{5}$" Wrq

SS Cyg 213843 est 8.4

6 38

L. P.

Tues. Dec 27, 1910

L.C. Obs 6" W Eq JD 9033

SS Cygni 213843 est 11.3

26 15
4 37 W

~~4 43~~
+43.1
4 39 W
2 17

R Draco 163266 est 8.3

26 18
9 46 W

2 20
9 50 W

+67.0

χ Cygni 194632 est 11.5

26 20
6 34 W

2 23
6 36 W

+32.6

RT Cyg 194048 est 11.0

26 23
6 43 W

6 49 W
2 28

R Cygni 193449 est 9.5 +48.4

TU Cyg 194348 est 10.4

6 47 W
2 30
+48.8

Dec 27, 1908

SX Cyg.	201130 2631 620 W	est 10.3	6 24 W 2 34 +304
U Cygni	201647	est 7.2	2 36 6 20 W +476
R Vulpec	205923 2637 538 W	est 9.5	2 43 5 43 W +233
T Cephei	210868	est 9.7	5 38 W 2 46 +682
S Cephei	213678	est 8.2	2 49 5 15 W +788

Dec. 27, 1910

RV Peg.	222129	est 10.3	
	2649		4 30 w
	4 28 w		2 51
			+29.8
S Lacert.	222439	est 8.8	
			2 54
			4 30 w.
			+39.9
R Lacert.	223841	est 9.4	
	2653		4 17 w
	4 7 w		2 57
			+41.6
T Cass	001754	est 11.2	
	439		4 42
	4 22 w		4 26 w
			+54.4
R Andr	001838	est 8.0	
			4 26 w
			4 45
			+37.8

Dec 27, 1910

RW Andr	004132	est 9.4	
			+32.1 4 8 W 4 48
V Andr	004435	est 9.3	
			4 44 W 4 49 +34 8
RR Andr	004533	est < 11.8	
			4 4 W 4 50 +33 8
R.U Andr	013238 452 3 20 W	est < 11.9	
			4 55 3 2.3 W +38.2
Y Andr	013338	est 9.1	
			+38 6 4 53 3 20 W

Dec 27, 1910

R Ariet	02102x	est 11.2	
	4 56		
	2 86 w 4		2 54 w
			5 04
			+ 248

22

L. P.

Dec 30, 1910 (Friday)

L.C. Obs

Nova Lacertae F.G. Obs.

est a 3, 0 d

$a = +51^\circ.3396$ 6.60 6.90

$d = +50.3695$ 7.22 7.22

14.12

7.06

L. P.

December 31, 1910 Saturday

L. O. Obs.

Nova Lacertae F.G. est a 3 N 2 ~~k~~ e =

a = +51.3396 6.60 6.90

e = +52.3288 7.01 6.81

9 55 6.86

Nova Lacertae

~~2~~8 25
22 32
5 5 3W

~~a 6~~ d

reject c; a 7 d

~~a 6~~ a ~~c~~ 6 d 3 ~~f~~ e 5 g 3 f 6 ~~k~~ b i h 4 ~~k~~ 4 ~~e~~ l

l ~~b~~ 3 m 3 α 5 β 3 ~~γ~~ β 1 γ 4 δ ~~ε~~

δ 5 ε 6 ε'. fainter stars not seen with enough certainty to est.

est of Nova a 2, 5 ~~k~~ g 4.42
6.13W

sky below this region to horizon quite hazy: this may have caused fainter star difficulties est

6.8
7.3
7.0

+51.9

L.P.

Wed. Jan. 4, 1911

L.C. Obs. 6" Wrat Eq.

Nova Lacertae 22 32 52 e 2 var 4 g

28 43 + 5 21

9 45 6 11 w 6 30 w

4 5 4

a 8 d 2 e 4 f 1 g 5 h 4 k 3 l ~~5~~ 4 α 3 γ 3 β 1 γ' 5 β'

δ' ~~5~~ δ 1 ε 4 η 6 ε' 4 o omaint ndd/double

o 2 p ~~e 2 var 4~~ g

(g 3 h 2 h)

Thurs Jan 5, 1911.

LC Obs.

Nova Lacertae +Ely. est e 4,8 g

7 04

Nova Lacertae 6" W Ey.

a 7 d 3 e 3 f 2 g 3b3 h 3 k 4 l 5 α 3 j 4 β 1 j'

γ' 4 α' 4 δ' 3 δ 3 η 4 ε 5 ε' 3 σ 4 p 3 q 2 r 3 p'

9 40 ~~e~~ e 5,2 g

4 52
6 23 W

+52,1

Thurs. Jan. 12, 1911

L.C. obs JD 9049 6" Wq.

W Cass	004958 est 9.8		
	4 34 3 45 w		4 37 3 44 w
			+580
X Cass	014958 est 11.4		
			2 46 w 4 38
			+584
W Andr	021143 est 9.8		
	4 40 2 29 w		2 30 w 4 41
			+436
o Ceti	021403 est 8.0		
	4 42 2 28 w		2 30 w 4 43
			-34
R Ceti	022000 est		
	4 44 2 26 w	Too hazy Leu	

Mon. Jan. 16, 1911

L.C. Obs 6" Wg.

7 20 SS Cygni est 120

7 23 Nova Lac b5, h2, 5 α

Wed. Jan. 18, 1911

L.C. Obs J.D. 9055 6" W Eq

	α Orion	eye est		
7 03	β Orion 4 α	3 β Gem		= 0.82
	at 3:10 S.T. =	7:6 E.M.T.		
	SS Cyg	213843 27 20 5 42 W	est 12.0	3 22 5 46 W +428
	U Draco	190967 27 23 8 14 W	est 10.6	8 24 W 3 25 +66.8
	Nova Lac	223252 27 26 4 54 W	est h2, 4α	3 27 4 58 W +57.8
	V Cass	230759 27 28 4 21 W	est 10.4	4 24 W 3 30 +57.9

Jan. 18, 1911

	Z Cas	233956	est 11.7	
				3 32 3 54 w
				+55 f
	SX Cyg	201130	est 10 f	
		2733 7 22 w		3 36 7 28 w
		region low	obs doubtful	
				+31.0
	SW Cyg	200366	est c 4.2 d	
7 43		2737 7 37 w		3 47 5 45 w
				+45 f.
	SZ Cyg	202946	est 8.9	
7 46				5 22 w 3 50
				+46 ?
	XZ Cyg	~~x~~ 193056	est 9.4	
7 50				3 54 8 28 w
	look up Var			
				+55 9

Jan. 18, 1911

RR Drac 18~~2~~6062 est ~~8.9~~ 9.2

8 03

~~7 58~~

2756

9 16 w

re-est Var

6 07

~~6 02~~

32

9 ~~20~~ w

+62.0

RZ Drac 182158 est 9.8

8 01

2803

9 42

4 55

9 49 w

+58.3

U Cephei 005381 est

408

3 15 w

pier stops telescope

SY Cass 000957 est 9.6

49

8 8

4 0 w

8 3 w

6 12

+57.6

SX Cass 000554 est 8.6

8 11

4 11 w

4 15

+54.2

Jan 18 1911

8 15	V Lacertae 224455 est 9.1	
	28 16	5 36 W
	5 32 W	4 19
8 15	Star marked X = 8.4	+55.6
	TT Andr 230845 est d 2, 2 e	
8 18	28 20	5 16 W
	5 12	4 22
	a 4 b 3 c 5 d 5 e	+45.6
	RS Cas 233261 est b 4, 1 c	
8 20		4 54 W
		4 24
		+61.8
	RU Camel 071069 est 8.7	
8 26	4 27	2 48 E
	2 43 E	4 30
	α 5 a	
		+69.8
	SU Drac 113267 est 9.3	
		4 36
8 32		
		6 55 E
		+68.2

Jan. 18, 1911

W Ursmaj. 093956 est 8.0

8 35

4 38
5 1 E

4 39
5 02

+56.8

SS Drac 122169 est 9.~~8~~6

8 38

4 40
7 41 E

4 42
7 39 E

+69.8

SW Drac 121270 est 10.3

8 39

4 43
7 30 E

+70.1

RV Ursmaj 132954 est ~~8~~ 10.1

8 43

4 44
8 45 E

4 47
8 40 E

+54.5

RW Cam 013056 est 9.5

8 46

3 18 W
4 50

+57.0

Jan. 18. 1911

X Aurigae	060450 4 5~~7~~2 1 12 E Too high		
RZ Per	012350 4 57 3 34 W	est < 11.8	3 36 W 4 58 +50 2
SU Tauri	054319 5 0 0 43 E	est 11.2	5 11 0 34 E +19 6
Y ~~Gem~~ Monoc	065711 5 12 1 39 E	est 10.8	5 14 1 37 E +11 8
V Gem	071713	est 8.4	2 0 E 5 17 +13 5

Jan .18, 1911

	072811. 5 17 2 11 ε	~~est~~ T Can Min	<120	5 18 2 11 ε +11.8
	U Can Min	073508	<11.8	5 22 2 15 ε +8 6
	S Gem	073723	est <120	5 26 2 12 ε +238
	U Gem	074922	est <11.9	5 29 2 24 ε +222
9 30	~~U~~ α Orion est eye =			

α Tauri 0 α, α 3 β Gem

34

1.06
0.91
0.98

Thurs. Jan. 19, 1911.

L. C. Obs.

10 20 α Orionis | α Can Min 6, 1 α Tauri, 3 β Gem.

1.08
0.96
0.91
295
0.98 mean magn.

Sun. Jan. 22, 1911

LC Obs. eye obs.

6 : 00 α Orion. β α Orion 5, 0 α Tauri, 3 β Gem 1

Copied from memory Jan 23. 1911 LC.

084
1.06
0.91
0.94

Mon. Jan 23, 1911

L.C. Obs.

α Orionis. eye est

10 00 β3α Orion .5

0 α Tauri

3 β Gem.

086

106

091

0.94

Tues. Jan. 24. 1911.

L.C. Obs. J.D. 9061

α Orionis eye ests.

6 00 β Orionis 5, 1 β Gem 0.84
1.11
0.98

9 30 α Tauri 1,1 β Gem 1.16
1.11
1.14

Copied from memoranda Jan 25. 1911.

Sun. Feb. 5, 1911

L.C. Obs. 9073

α Orionis expects

6 00 α Tauri 1.1 β Gem. 1.14

Friday Feb. 10, 1911

L.C. Obs 9078

α Orionis eye est

8 30 α Tauri 0, 2 β Gem ^{10d} moon br
sky hazy

Feb. 21, 1911 Thur

L. C. Obs eye

10 05	α Orion	05 (90?)	est α 1 α	Tauri

Feb. 23, 1911

L C Obs. 6" W Eq - JD 9091

S.T. = 6:27 at 8:00 E.M.T.

T Andr 0017 26 est
6 27
6 10 W

Connection for Light on finder is
broken. Cannot work the 6"

Obs. copied on sheets.