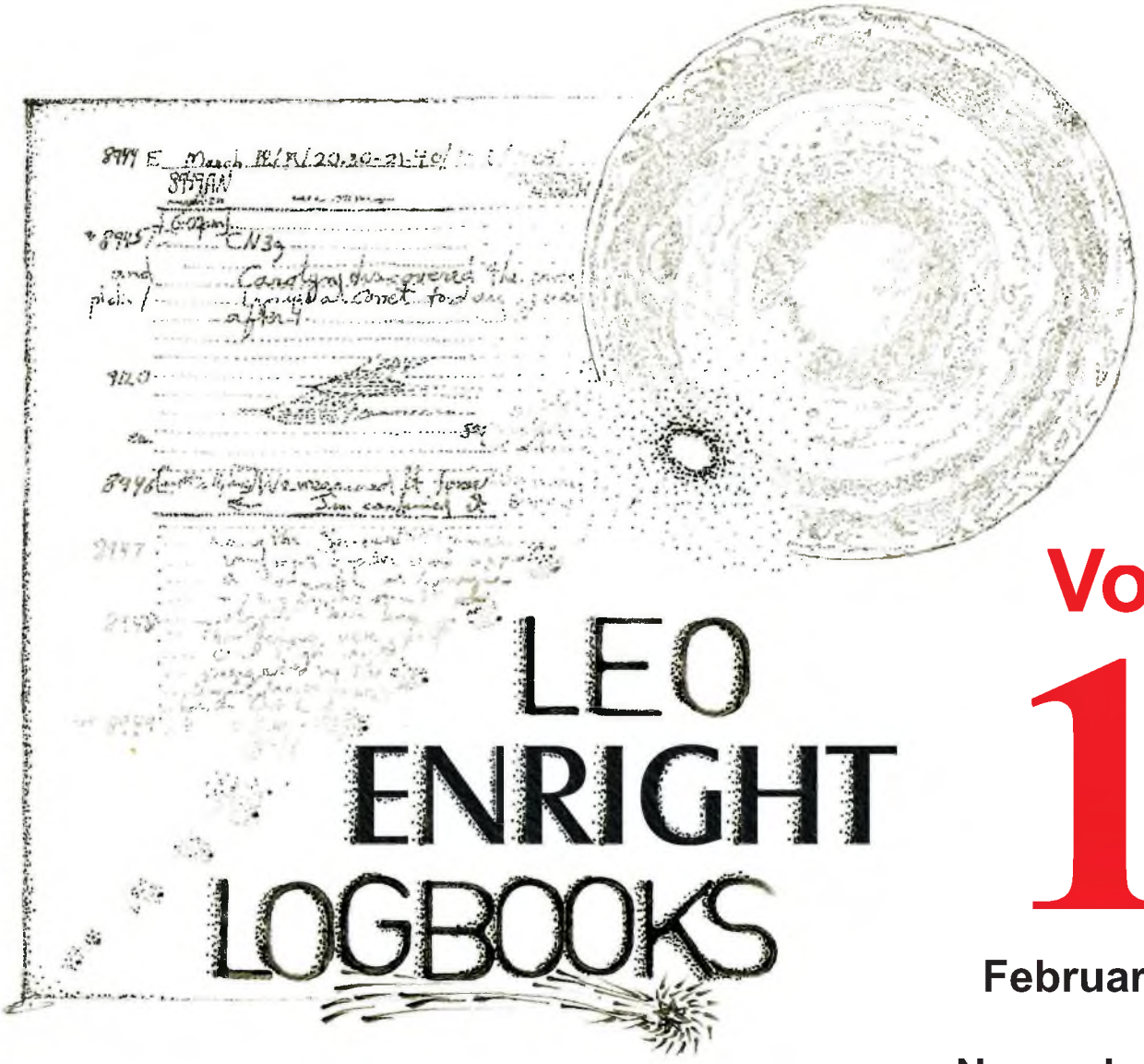

LEO ENRIGHT LOGBOOKS

Volume 11

February 26, 1995
to
November 25, 1995

11

FANCO

cahier SCIENCE book

PAPIER EPAIS – HEAVYWEIGHT PAPER – 100 PAGES

name. nom LEO ENRIGHT

subject. sujet Observing Feb. 26, 1995 – Nov. 25, 1995

49-1092
FANCO
606 De Courcelle,
Montréal, Qué. H4C 3L5

0 55206 91092 9

11" x 8.3/8" - 279 mm x 212 mm

1995

JANUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

FEBRUARY

S	M	T	W	T	F	S
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26	27	28				

MARCH

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APRIL

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30						

MAY

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JUNE

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JULY

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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
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OCTOBER

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1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Observing Log

Code:

Year | Day | Date | Time | Place | Sky Conditions S = Seeing T = Transparency | Instrument(s)

Objects Observed

e.g.:

1995 | Sa.-Su. | Feb. 25-26 | 02:30-04:30 UT | S8 T9 | 20x100b

Vesta, RW Tau, R Leo

Time:

UT = Universal Time
n = night
m = morning
f = forenoon
a = afternoon
e = evening

Place:

y = yard
OO = Oso Observatory
nd = north deck
sh = shoreline of lake
ss = solar station
t = table at solar station
in = indoors, through window
r = on roof of house

Sky Conditions:

S = Seeing
T = Transparency
0-10 scale: 0 = nil or extremely poor
10 = absolutely superb!
cml = crescent moonlight
gml = gibbous moonlight
fml = full moonlight
twl = twilight.

Instruments

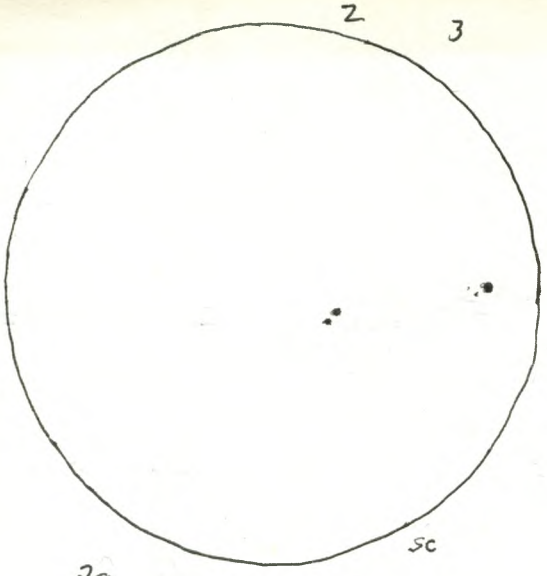
c.14 = Celestron 14
C-8 = Celestron 8
Ast = Astroscan
20x100b = 20x100 binoculars
11x80b = 11x80 binoculars
9x63b = 9x63 binoculars
7x35b = 7x35 binoculars
32 = 32mm Ocular
32-2 = 32mm 2" Ocular
K = Kellner
O = Orthoscopic
Ko = König
WA = Wide Angle
P = Plössl
ph = photography
p/b = piggyback
o/a = off-axis
Ba = Barlow lens
EG = Easy Guider
EGlf = Easy Guider, lens forward
EGlb = Easy Guider, lens back

Objects:

PN : planetary nebula
GC = globular cluster
OC = open cluster
SG = Spiral galaxy
EG = elliptical galaxy
D = double star
LPV = long period variable
SR = semi-regular variable

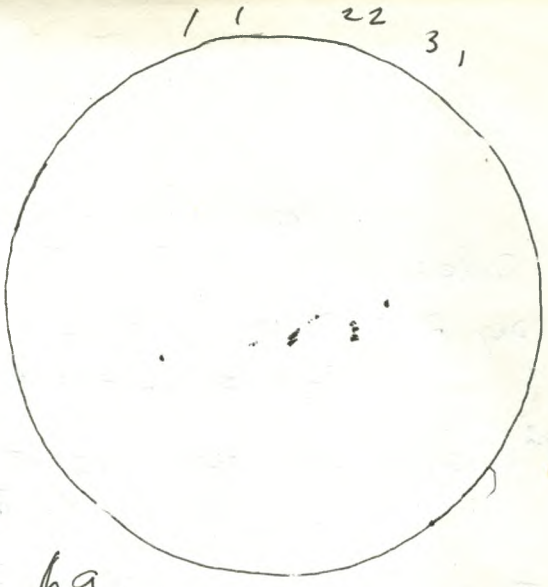
Atlases:

U = Uranometria
U2k = Uranometria Chart 2k
AAVSO = AAVSO Variable Star Atlas



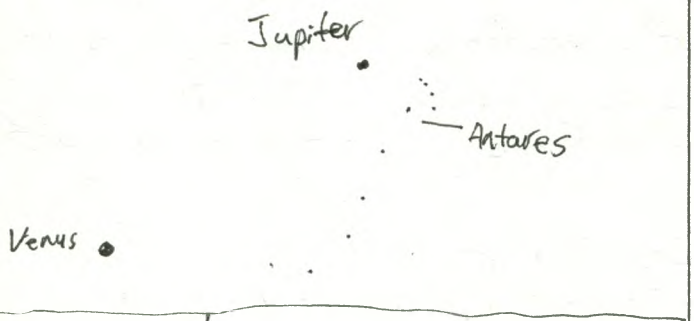
29
5S
RSN25

Feb. 26
19:35-19:40 UT



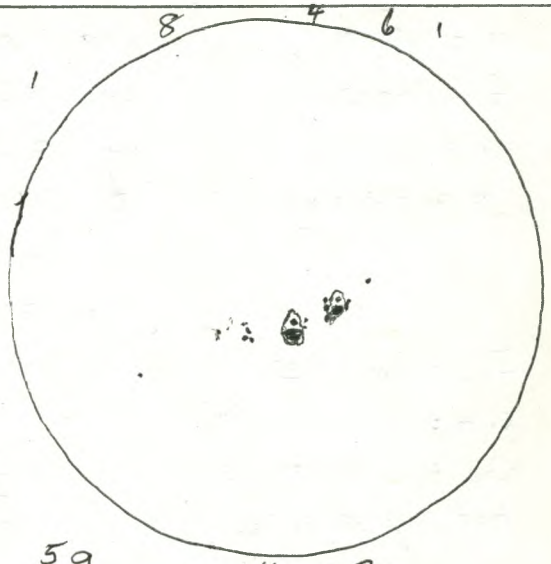
6g
10S/
RSN70

Mar. 1
20:00-20:05 UT



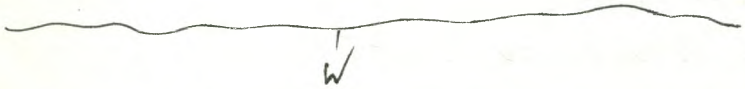
Mar 2
10:15 UT
(5:15 a.m. E.D.T)

beautiful twilight array of stars and planets

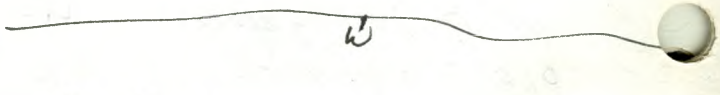


5g
20S
RSN70

Mar. 2.
20:10-20:15 UT



Mar. 2-3
23:40 UT



Mar 3-4
23:15 UT

1995

Su. Feb. 26 19:35-19:40 UT ss C-8, 32, 28, 20, 15.5
sun 2g 5s RSN25

Su-M. Feb. 26-27 02:30-04:30 UT y S-8(?)T9 20x100b
Vesta near 5 Tau, RW Tau, M45, M42, M43, M41, M46, M47, R Leonis area of T Pyxidis, M104
Previously I had observed the Zodiacal Light in W at 00:30 UT

W. Mar. 1. 20:00 - 20:05 UT ss C-8, 32, 28, 20, 15.5
sun 6g 10s RSN 70

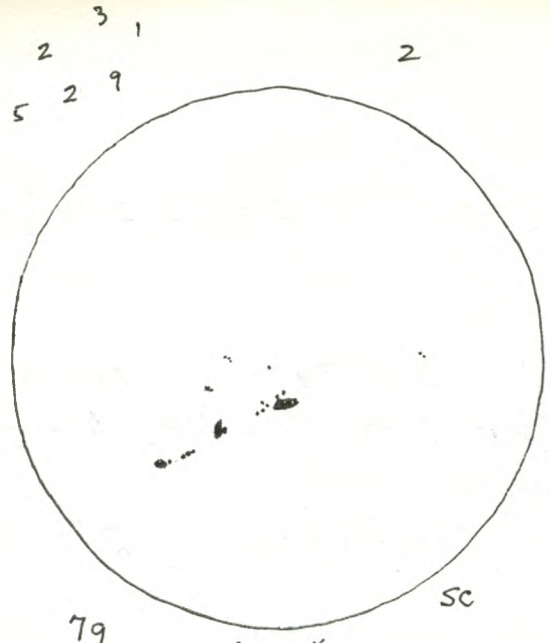
W-Th Mar. 1-2 m. 10:15 UT in twl ne
Venus and Jupiter in SE in morning twilight

Th. Mar. 2 20:10-20:15 UT SS C-8, 32, 28, 20, 15.5
Sun 5g 20s RSN70

6:40 p.m. E.S.T.
Th-F. Mar 2-3 23:40 UT Silver Lake and on Hwy 7 twl ne
D crescent moon about 36 hours old seen at restaurant at Silver Lake and as I drove to Sharbot Lake
01:00 UT
ZL. Zodiacal Light in W. up to Pleiades; constellations

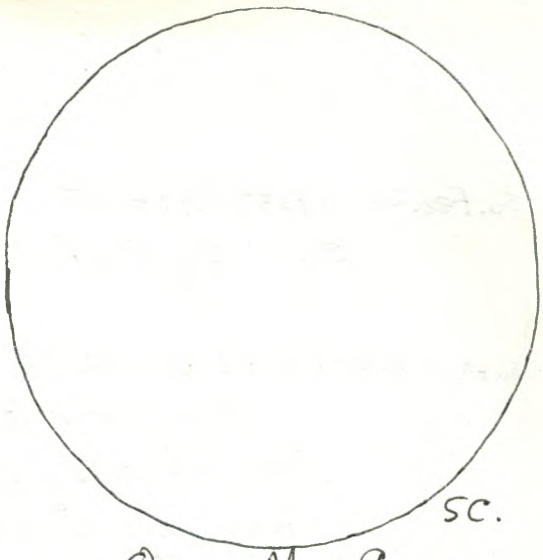
6:45 - 6:45 p.m. E.S.T.
F-S. Mar. 3-4 23:15 - 23:45 UT in Kingston and on Hwy 38 twl ne
D crescent moon up about 20° in W. - later seen much lower with Earthshine as I drove from Bedford to Sharbot Lake from about 00:55 - 01:25 UT (7:55 - 8:25 p.m. E.S.T.)
ZL. Also Zodiacal Light seen up to Pleiades at about 01:25 UT (8:25 p.m. E.S.T.)

F-S. Mar. 3-4 03:30- 04:30 UT y S-8(?)T 8.5-9 20x100b
M42, M43, M78, M35, M36, M37, M38, M104, M46, M47, R Leonis - probably up to mag. 6.5, RW Tau, appeared fainter than seen once



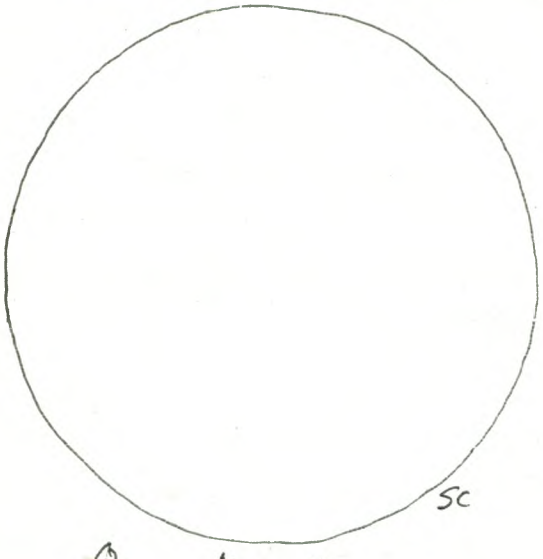
7g
24S
RSN94

Mar 4
19:55-20:00UT



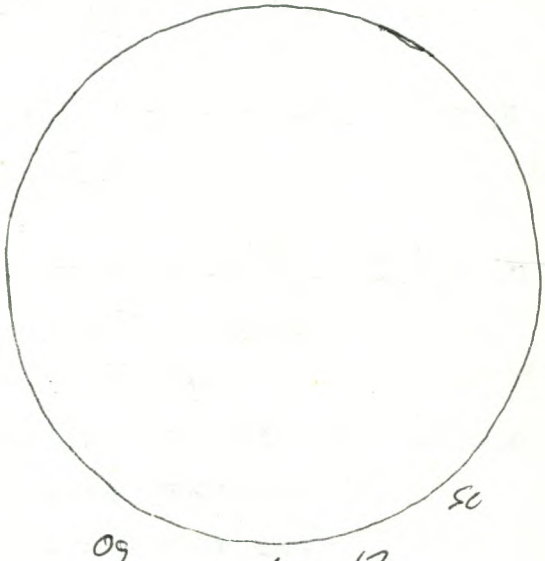
0g
0S
RSNO

Mar 9
20:30-20:35UT



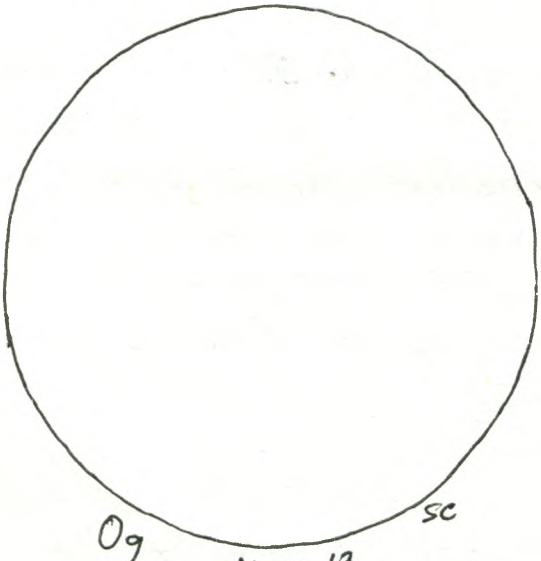
0g
0S
RSNO

Mar. 10
19:00-19:05UT



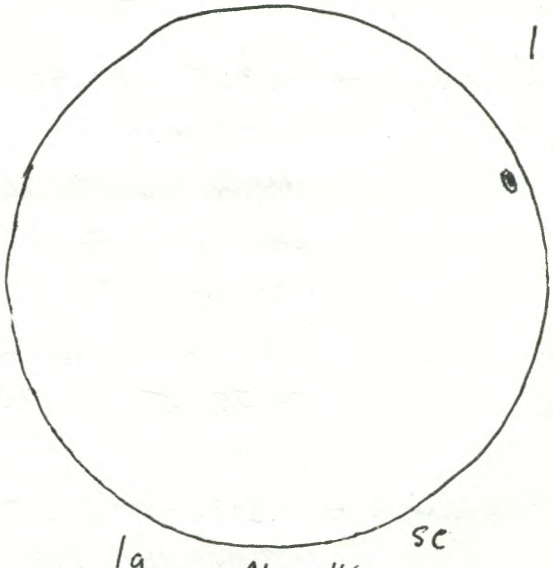
0g
0S
RSNO

Mar. 12.
20:35-20:40UT



0g
0S
RSNO

Mar. 13
18:45-18:50UT



1g
1S
RSN11

Mar. 14
16:25-16:30UT

1995

before, Vesta in Tau at R.A $5^h 45.5^m$ Dec. +24.2° (-See U136)
near TU Tau, M1

Sa. Mar. 4 19:55-20:00UT ss C-8,32,28,20
sun 7g 24s RSN 94

Sa.-Su. Mar. 4-5 02:00-04:00UT 00 S-8(?) T 8-9 C-14 ; 20x100b
C-14 : Mars, Trapezium, M44
20x100b : area of T Pyxidis, M46, M47, M42, M43, M78, area of R Lep - but star very faint - barely seen - about mag. 11.5 probably, RX Eri - also barely perceptible; S Mon, NGC 2244 and Rosette Nebula, Plaskett's Star, M35, M36, M37, M38, Vesta in Taurus, SS Vir and area in Virgo, R Leonis - up to about mag. 6.5., RW Tau and nearby ~~stars~~ including 41-65 (U 133); Cluster DoDz4 and star TU Tau (U136) in region of asteroid Vesta, M1.

Th. Mar. 9. 20:30-20:35UT ss. C-8,32,28,20,15.5
sun 0g 0s RSN 0

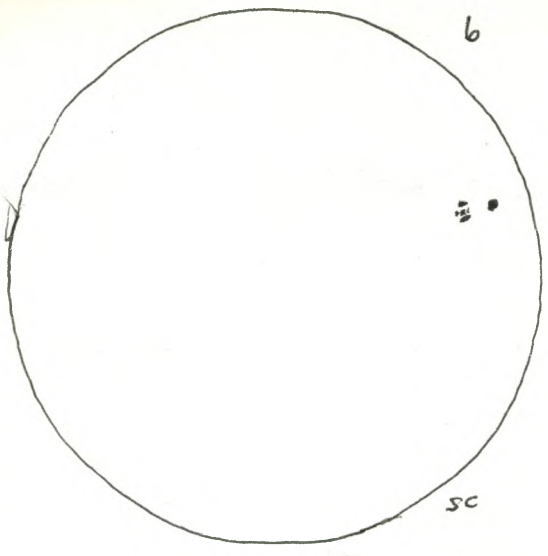
F. Mar. 10 19:00-19:05UT ss C-8,32,28,20, 15.5.
sun 0g 0s RSN 0

Su. Mar. 12 20:35-20:40UT ss C-8,32,28,20,15.5
sun 0g 0s RSN 0

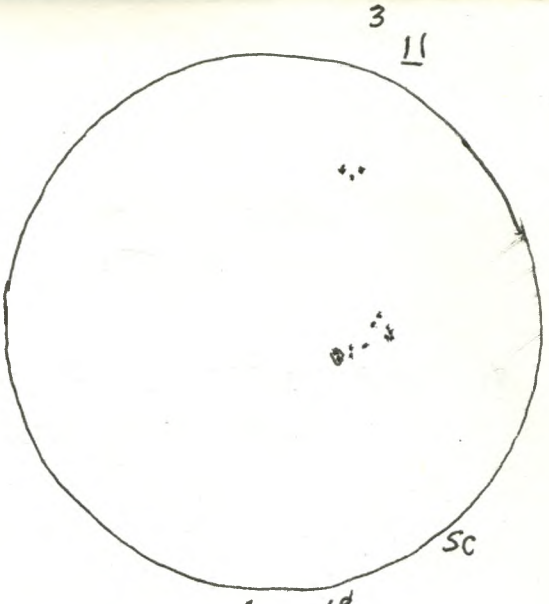
M. Mar. 13 18:45-18:50UT ss C-8,32,28,20,15.5
sun 0g 0s RSN 0

Tu. Mar 14 16:25-16:30UT ss C-8,32,28,20,15.5.
sun 1g 1s RSN 11

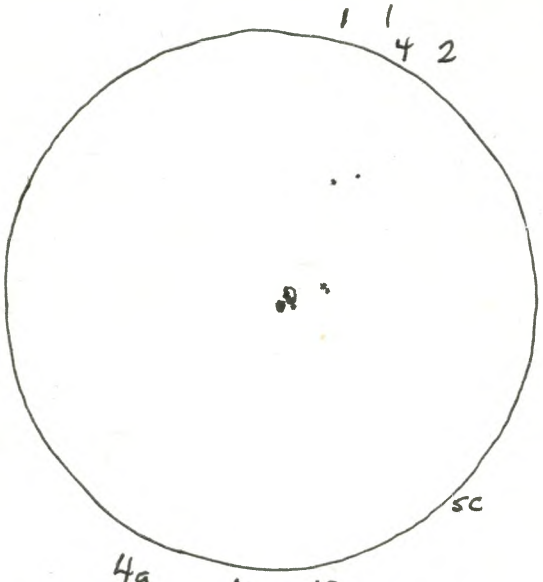
W. Mar. 15 19:40-19:45UT ss C-8,32,28,20,15.5
sun 1g 6s RSN 16



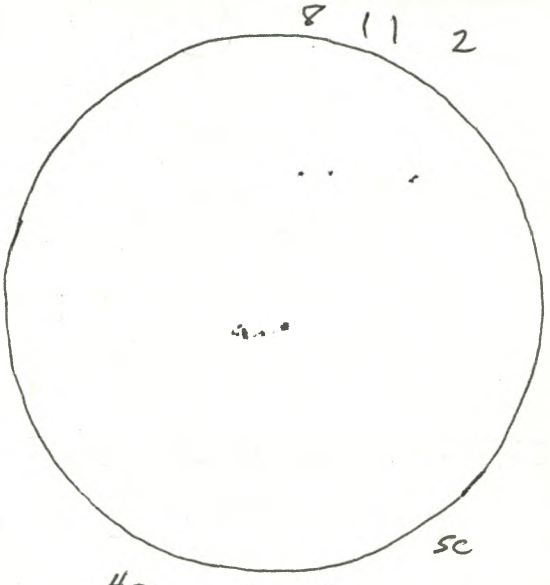
1g Mar. 15
6s 19:40-19:45 UT
RSN16



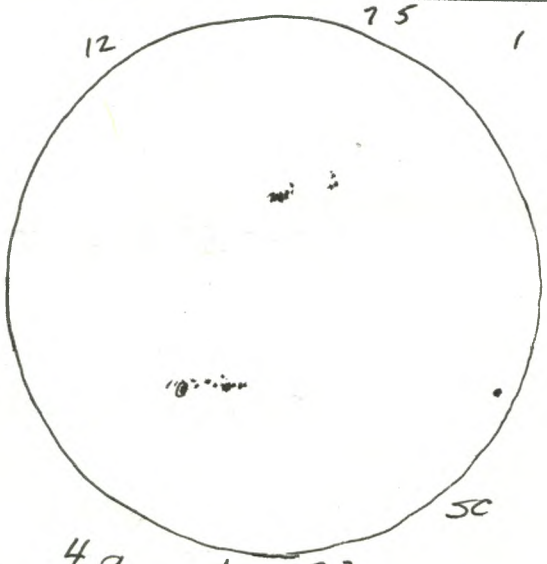
2g Mar. 18
14s 18:55-19:00 UT
RSN34



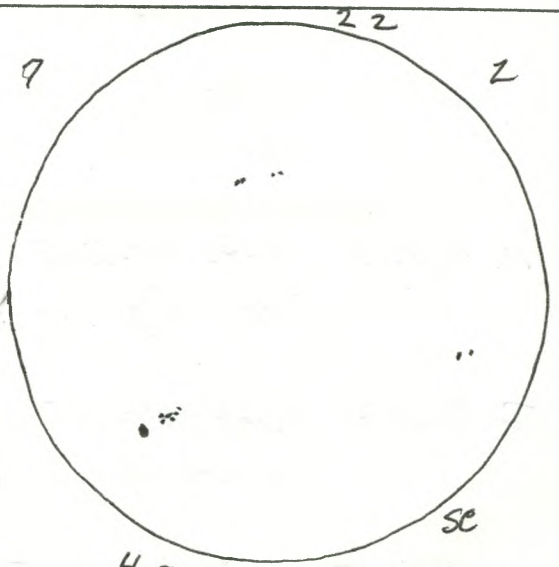
4g Mar. 19.
8s 16:50-16:55 UT
RSN48



4g Mar 20
12s 18:50-18:55 UT
RSN52



4g Mar. 23
25s 20:35-20:40 UT
RSN65



4g Mar. 24
13s 20:25-20:30 UT
RSN53

1995

Sa Mar. 18 18:55-19:00 UT ss c-8, 32, 28, 20, 15.5.
sun 2g 14s RSN34

Sa-Su Mar. 18-19 00:45-01:35 y S-8(?) T 7-8.5 (haze) 20x100b.
M42, M78, M46, M47, NGC2244, Rosette Nebula, SMon, Plasketts Star, RW Tau, Pleiades, area of M1, Double Cluster, Alcor and Mizar, RLeonis - about mag. 6 - at or near its brightest, Mars, M44, M67, area of RLep, M81, M82
Zodiacal Light was easily visible up to the Pleiades.

Su. Mar. 19 16:50-16:55 ss c-8, 32, 28, 20, 15.5
sun 4g 8s RSN48

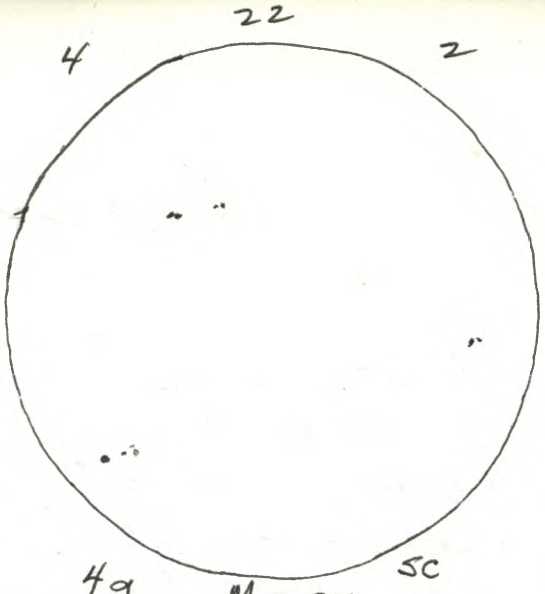
M Mar. 20 18:50-18:55 UT ss c-8, 32, 28, 20, 15.5
sun 4g 12s RSN52

Th. Mar 23 20:35-20:40 UT ss c-8, 32, 28, 20, 15.5
sun 4g 25s RSN65

Th.-F. Mar 23-24 01:00 UT y ne
spring constellations and Zodiacal Light is W. very bright at the end of astronomical twilight - brighter than the winter Milky Way.
02:30-03:40 UT y S-7(?) T 9.5(!) ne; 20x100b
ne: spring constellations
20x100b: area of T Pyxidis, M42, M43, NGC2244 and Rosette Nebula, SMon, RLeonis - very bright - about mag. 6, M1, M35, M36, M37, M38, M57, δ Cep, R CorBor, T CorBor, Double Cluster, SS Vir, M65, M66, NGC3628

F. Mar. 24 20:25-20:30 UT ss c-8, 32, 28, 20, 15.5
sun 4g 13s RSN53.

F.-S. Mar 24-25 04:45-04:40 UT y, oo S-7-8 T 9-9.5(!) 20x100b; C-14, 32
Zodiacal Light in W. →



4g
10S
RSN50

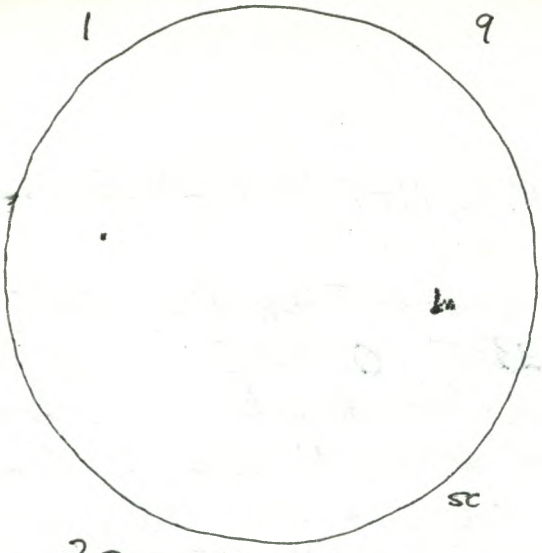
Mar. 25
20:35-20:40UT

y; 20x100b; area of Rigel, M46, M47, NGC2423, area of δCep, M78.
oo; 20x100b: M45, RW Tau, area of T Pyxidis, M50 and area (U273) - OC 2335, OC 2343 and Cr 465 FN CMa, V523 Mon, X Mon, R CorBor, T CorBor, R Leonis - near max.; 3 close variables in N CMa Z CMa (possibly since mag. range is 8.9 - 11.3 and there is a star very near) FZ CMa and GU Ma (U273), M35 and nearby cluster, M36, M37, M38, M13, M92, M51
C14: M65, M66, 3628 (U191); M95, M96, M105, 3384, 3389 (U190); Mars, M44

Sa. Mar. 25 20:35 - 20:40 UT ss C-8,32,28,20,15:5
sun 4g 10s RSN50

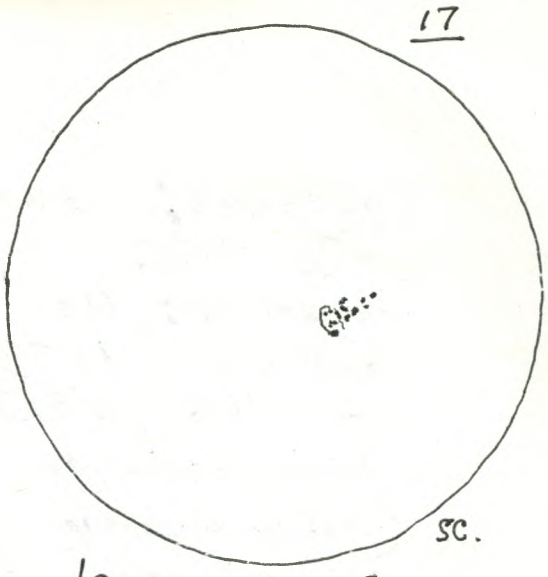
Sa - Su Mar. 25-26 01:30 - 06:00 UT oo s-7-8 T9-9.5(!) 20x100b; C-14,32,55,40
20x100b: M41, M42, M43, 1973, 1977 (E/RN near M43), M47, M46, 2423 - OC N of M47, R Leonis, area of T Pyxidis, V Can and U Can (U141) (both LPVs but both could be detected, V having been at max. on Feb 5 at mag. 7.9 - from S.&T.), R Hya and SS Hya (U330) (R Hya was to have been at max. on Mar. 1 at mag. 4.5), R Corvi (U328) (to have been at max. on Feb. 4 at mag. 7.5 - an LPV), 3115 - the "Spindle Galaxy" in Sextans - mag. 9.2 - bright enough to be seen in the binoculars - in a fairly sparse region of Sextans - about 11° E. of Alphard (α Hya), R CorBor, T CorBor, M92, M13, M44, M65, M66, 3628 - near M65 and M66; M57 in E when Lyra rose, M12 and M10 in Oph.
C-14: using filters - area of Horsehead - not very successful, M42 - excellent, Pleiades - nebulosity good, Trapezium, Rosette area - not as good as expected; without filters: 4038, 4039 - the Rattail or RingTail or Antennae Galaxies (U328); M51, M65, M66, 3628.

4038/9



2g
105
RSN30

Mar. 26
20:00-20:05UT



1g
175
RSN27

Mar. 27
20:25-20:30UT

1995

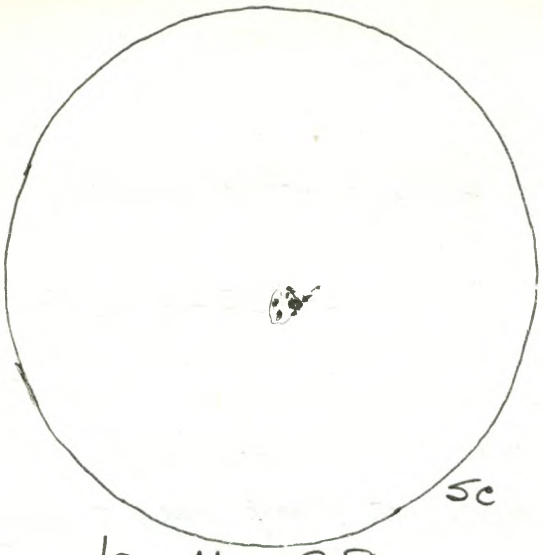
Zodiacal Light was bright in early part of session.

Su. Mar. 26 20:00 - 20:05 UT C-8, 32, 28, 20, 15.5
Sun 2g 10s RSN 30

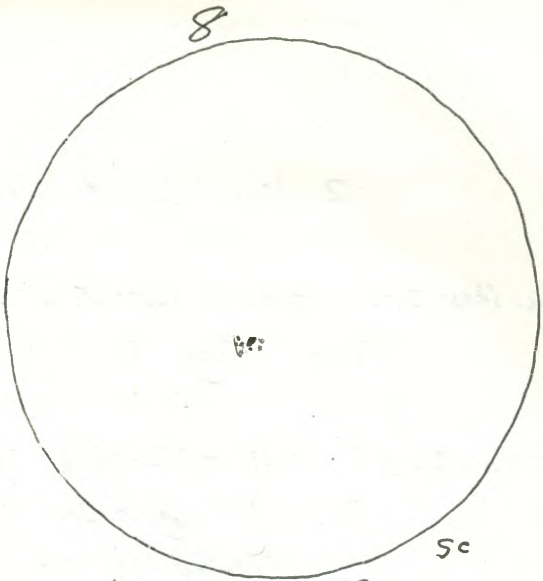
S-Mar. 26-27 01:10 - 02:50 UT y s(8) T 9 ne; 20x100b
ne: 3rd night in a row with excellent transparency - spring constellations
20x100b: M42, M43, area of R Lep, 1973, M35, M36, M37, M38, M1, area of T Pyxidis, M44, R Leonis, 3115 - Spindle Galaxy in Sextans (U279), about 1½° E of Alphard (3115 at R.A. 10h 05m, Dec.: -7.7°), U Can, V Can, and S Can - three variables near M44 (See U141)

M. Mar. 27 20:25 - 20:30 UT C-8, 32, 28, 20, 15.5.
Sun 1g 17s RSN 27

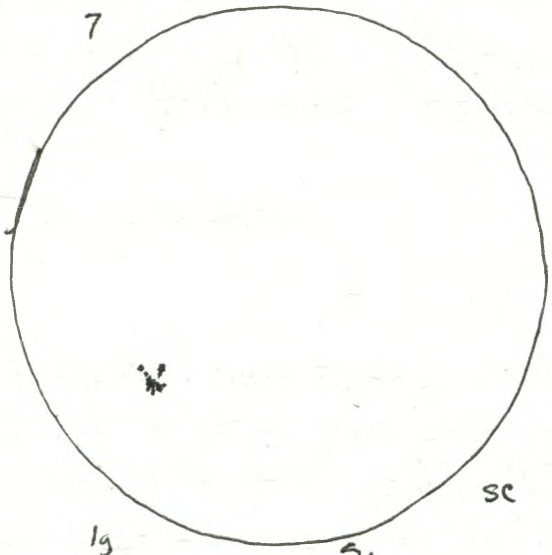
M.-Tu. Mar. 27-28 00:50 - 03:40 UT y and 00 s-8-9 T 9-9.5 (!) 20x100b; C-14, 55
y, 20x100b: area of R Lep, M42, M43, 1973, 1977, M78
00, 20x100b: area of T Pyxidis, M41, M46, M47, 2423, R Leonis, area of 3115, 3242 - "Ghost of Jupiter" PN; 2392 - PN in Gem. - the Eskimo Nebula, area of 2371 and 2372 - faint double lobed planetary nebula in Gem. prior to observing it in the C14, though it could not be seen in the binoculars.
C-14: - with filter M42 (M43), part of Pleiades, 2371 and 2372 - the double-lobed planetary in Gem - faint at mag. 13, but the filter helped; 2392 - the Eskimo Nebula - much brighter; 3242 - "the Ghost of Jupiter" PN in Hydra
Aur. A glow of Aurora was seen in the N. There was also a low arc for a while. This was the fourth excellent night in a row!
Zodiacal Light was very good in the W. at the beginning of the session.



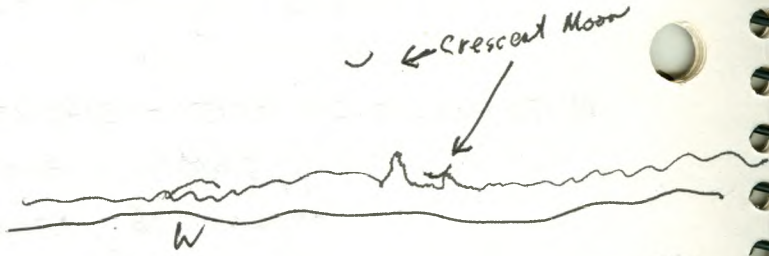
lg Mar. 28
9S 20:20-20:25 UT
RSN19



lg Mar. 29
8.5
RSN18



lg
7s Mar. 31
RSN17 21:15 - 21:20 UT



Mar 31 - Apr. 1 23:55 - 00:15 UT

1995

Tu. Mar. 28 20:20-20:25 UT ss C-8, 32, 28, 20, 15.5
sun lg 9s RSN 19

T.-W. Mar. 28-29 01:10-03:00 UT Last Duel Park in Perth S-8 T8 20x100b; Ast, 8, 21
20x100b: at session for students of course, attended by
5 students: M35, M36, M37, M38, M46, M47,
M42, M43, M45, M41, M44, M65, R Leonis, Double Cluster
Ast: M45, Mars, M65
During ride home (03:15-03:25 UT) Denise and I saw a very intense Aurora in the N. There were spikes and it was very bright from NW to NNE.
5 of the students from the Feb.-Mar. Algonquin Astronomy Course attended the session

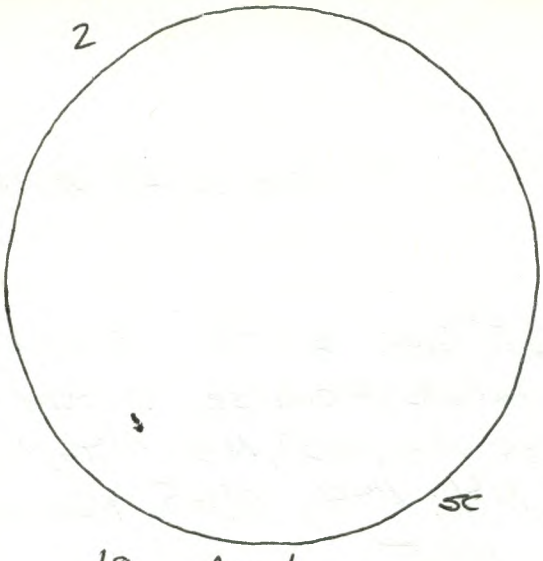
W. Mar. 29 20:25-20:30 UT C-8, 32, 28, 20, 15.5
sun lg 8s RSN 18

F. Mar. 31 21:15-21:20 UT ss C-8, 32, 28, 20, 15.5
sun lg 7s RSN 17.

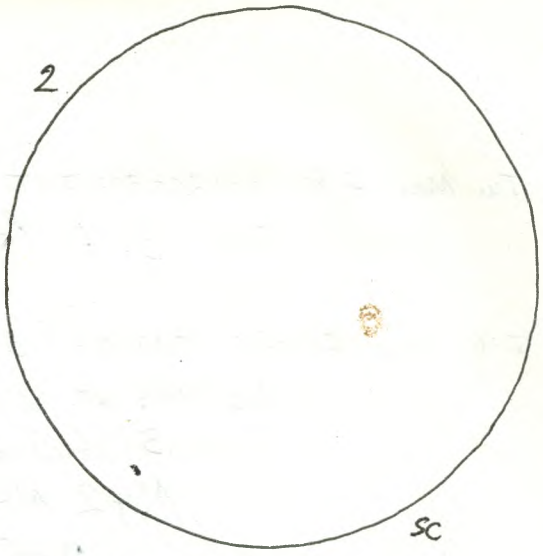
F.-S. Mar. 31-Apr. 1 23:45-00:20 UT Silver Lake Provincial Park 9x63b; 10x50b
- looked for and saw very young moon. Denise saw it first and then I saw it also in binoculars, both mine (9x63b) and hers (10x50b). The crescent was extremely thin, probably could not be seen without the binoculars. We saw it from 23:55 to 00:15 UT (6:55 pm - 7:15 pm E.S.T.. The sky conditions cooperated in the W. but there was thick cloud in S. and SE. Denise saw the thin crescent naked-eye for about 3 seconds. Since New Moon was at 02:09 UT on Mar 31, we saw it at 21h 46m after New Moon. - also photographed the area.

Moon 21h 46m old.

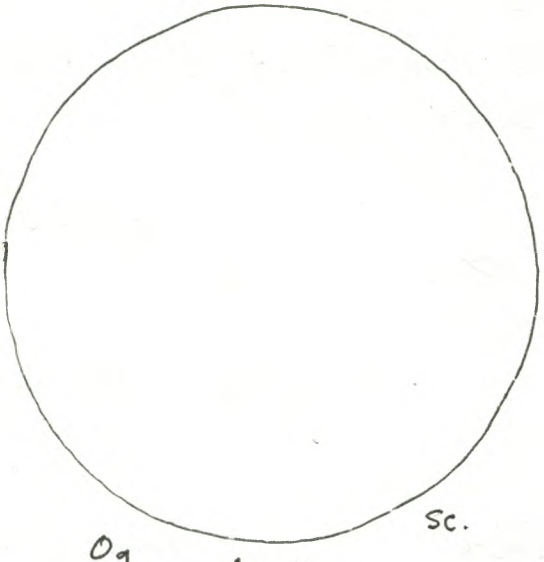
03:50-04:20 UT y 20x100b
R Leonis, R CorBor, T CorBor, Kemble's Cascade and 1502 in Cam (U18), M65, M66, R Corvi.



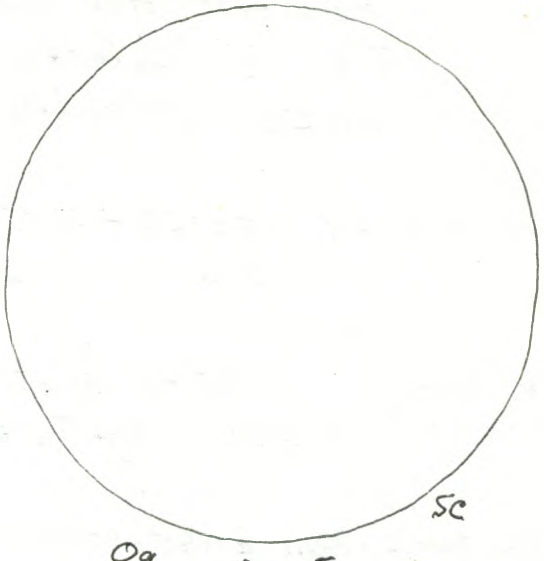
1g
2s
RSN12 Apr. 1
19:10-19:15 UT



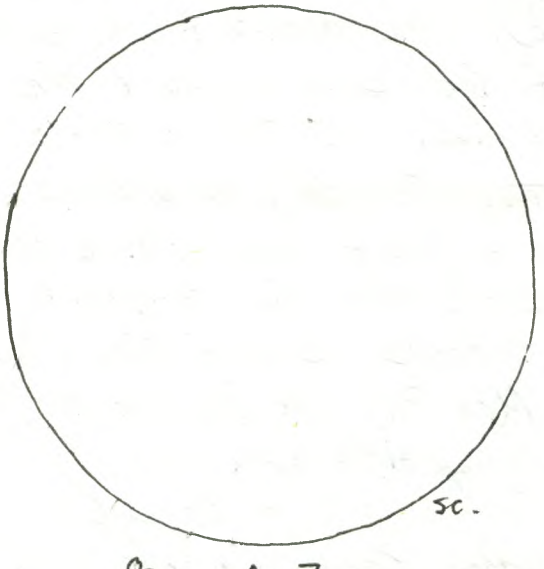
1g
2s
RSN12 Apr. 2
17:05-17:10 UT



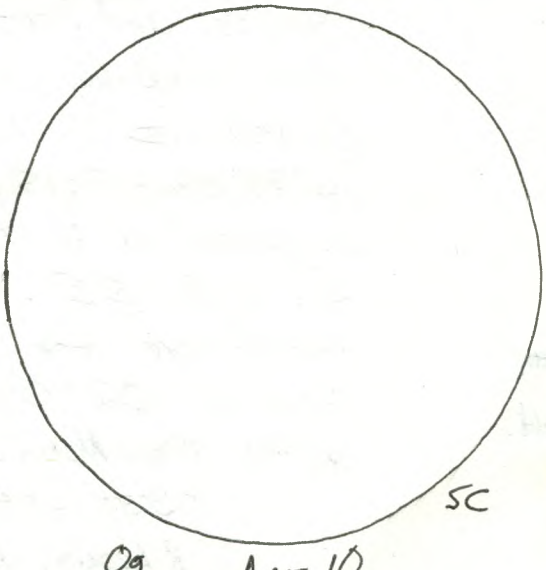
0g
0s
RSNO Apr. 4
19:20-19:21 UT



0g
0s
RSNO Apr. 5
20:40 UT



0g
0s
RSNO Apr. 7.
19:25-19:30 UT



0g
0s
RSNO Apr. 10
19:50-19:55 UT

1995.

Sa. Apr. 1 19:10-19:15 UT SS C-8, 32, 28, 20, 15.5.
sun lg 2s RSN12

S.-S. Apr. 1-2 02:30-03:30 UT y s-8(?)T 7-8 some cirrus 20x100b
M35, M36, M37, M38, Kemble's Cascade and 1502 and BC Cam-
in Camelopardalis, R Cor Bor, T Cor Bor, R Leonis,
Auroral glow in the N. - up about 25° - throughout the
observing session - becoming brighter by times.

Su. Apr. 2 17:05-17:10 UT SS C-8, 32, 28, 20, 15.5
sun lg 2s RSN12

Tu. Apr. 4 19:20-19:21 UT SS C-8, 32
sun Og Os RSNO Clouds cut short the observing session.

W. Apr. 5 20:40 UT t C-8, 32
sun Og Os RSNO (observed quickly because of
plan to go to Kingston soon after to attend
O.S.S.T.F. meeting and meeting of science teachers at MacArthur)

(3:11 a.m. E.D.T.)
Th.-F. Apr. 6-7 07:11 UT in after moonset. ne
Aur. active Aurora in N with high extensive "sheet of Aurora"

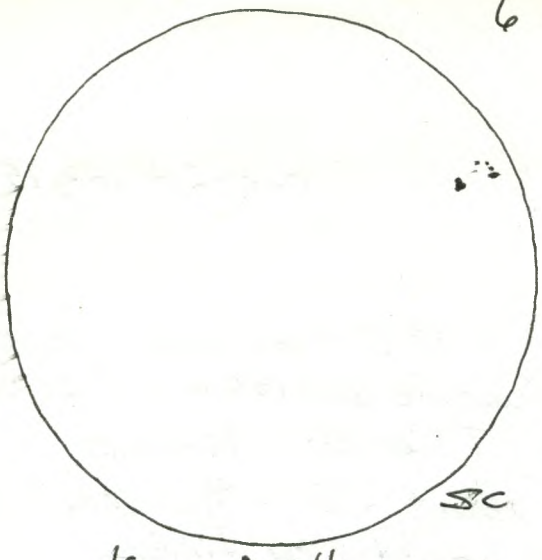
F. Apr. 7 19:25-19:30 UT C-8, 32, 28, 20, 15.5
sun Og Os RSNO

M. Apr 10 19:50-19:55 UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSNO

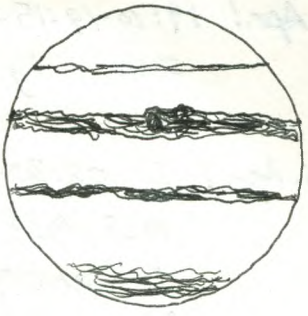
Tu. Apr. 11 20:20-20:25 UT SS C-8, 32, 28, 20, 15.5
sun lg 6s RSN16

F.-S. Apr. 14-15 m 09:40-10:10 UT sh+t twl 9x63b and C-8, 19, 12, 8, 5
sh, 9x63b * observed Venus - very bright among the clouds
in the E, but did not see Saturn which should

6

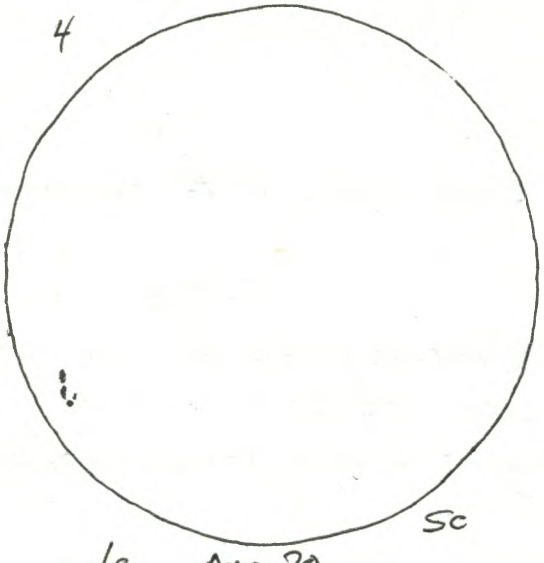


lg
6s
RSN16
Apr. 11
20:20-20:25UT

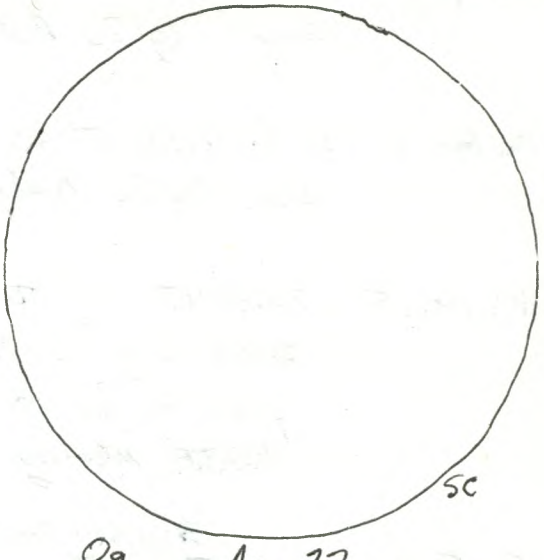


Jupter
F.S. Apr 14-15 m10:00UT (6:00am E.D.T.)

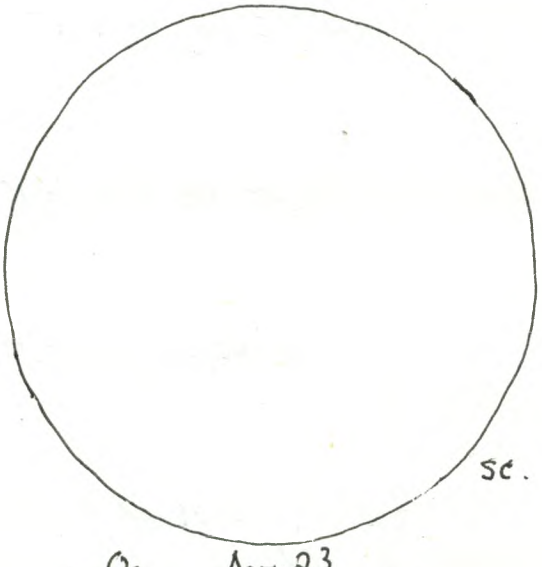
4



lg
4s
RSN14
Apr. 20
19:40-19:45UT



Og
Os
RSNO
Apr. 22
21:50-21:55UT



Og
Os
RSNO
Apr. 23

1995

have been very near since only 2 days before they were less than 1° apart. However it was well into morning twilight

c-8, E: observed Jupiter and 4 Moons. Two bands were prominent, especially the North Equatorial Belt. The area near the South Pole seemed slightly darker but there did not seem to be as distinct a band as previously seen.

The Moon was glimpsed setting (or actually about 20 minutes before setting since setting time was about 10:19 UT. A Partial Lunar Eclipse was to take place later and be visible from the western part of the continent. The penumbral phase was to begin shortly - at about 10:08 UT. It was also not a favourable occasion here for viewing an occultation of Spica which could be viewed also from the west.

Th. Apr. 20 19:40-19:45 UT SS c-8, 32, 28, 20, 15.5.
sun 1g 4s RSN14 hazy conditions

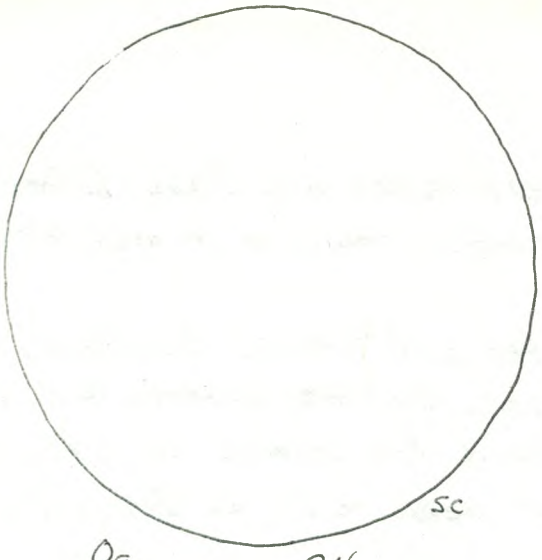
Apr. 22
Sat 21:58-21:55 UT SS c-8, 32, 28, 20, 15.5
sun 0g 0s RSN 0

Su. Apr. 23 19:10-19:15 UT SS c-8, 32, 28, 20, 15.5
sun 0g 0s RSN 0

Su-M. Apr. 23-24 01:45-02:20 UT y T-5 haze cloud ne
constellations; one bright Lyrid meteor below the Little Dipper - about mag. 1 - leaving a 5-10 sec train - (also saw a bright Lyrid (mag. -1) the previous night when looking S. through bedroom window. It was long, going E. to W and about mag. -1.) There was a persistent Aurora glow during the observing session. On checking twice during the night I also saw Aurora.

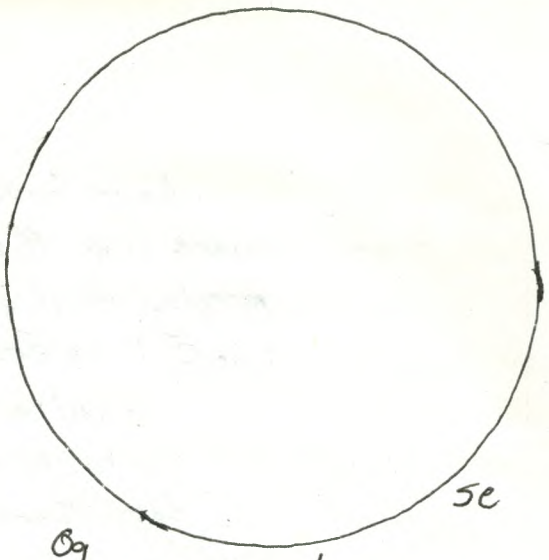
2 Lyrid

Aurora



Og
Os
RSNO

Apr. 24
19:55-20:00 UT.



Og
Os
RSNO

May 1
21:25 UT

1995

M. Apr. 24 19:55-20:00 UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSNO

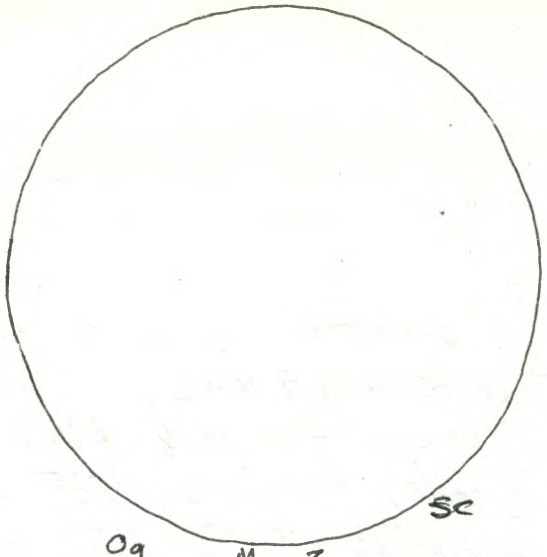
M.-T. Apr. 24-25 02:30-04:15 UT 00 S-9(?)T9 C-14, 32, 7.4; 20x100b
C-14: Mars, M67, M104, Jupiter and 4 moons,
20x100b: area of τ Pyxidis (viewed from yard), M104, M144, M36, M37, M38, Kemble's Cascade, R Leonis, M5, area where Pluto is found in Ophiuchus, M12, M57, Elyrae, M13, M92, Jupiter.
- photographed area of Aurora in N., and area of Leo and Mars W. of Regulus.

8:10 - 8:30 pm E.D.T Silver Lake
S.-M Apr. 30-May 1 00:10-00:30 UT Prov. Park twl ne; 9x63b.
- tried to see Mercury very low and possibly the young crescent moon, but because of clouds low in W, - could not see them Moon would have been about 31 hours old, since New Moon was on Apr. 29 at 17 36 UT

M. May 1 21:25 UT SS C-8, 32
sun Og Os RSNO brief look - clouds

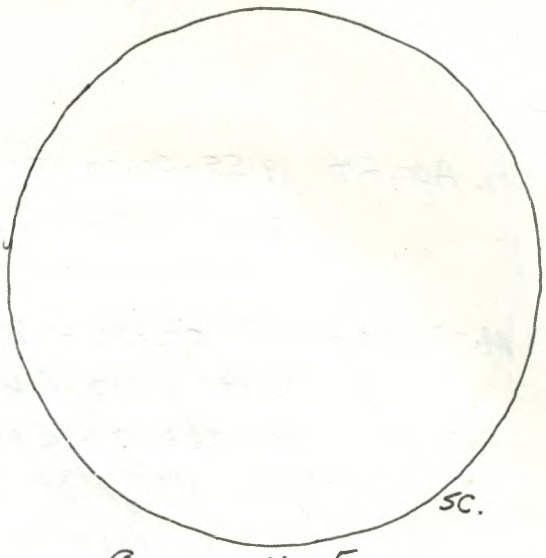
8:20 - 8:50 E.D.T. Silver Lake
M.-T. May 1-2 00:20-00:50 UT Prov. Park twl ne, 9x63
- tried to see young moon (about 55 hours old) near Hyades and Mercury near Pleiades, but did not see them because of low clouds.
- saw Betelgeuse with binocalars
- Denise saw moon and Mercury while driving near St. George's Lake on Hwy. 38.

7:30 - 8:40 p.m. E.D.T Silver Lake
T.-W. May 2-3 23:30-00:40 UT Prov. Park twl ne, 9x63b
- tried for 3rd consecutive night to see Mercury and the crescent Moon - saw the crescent Moon at 00:29 UT (8:29 p.m. E.D.T) very high - 22° - much higher than expected, but did not see Mercury



Og
Os
RsNO

May 3
21:00 - 21:05 UT



Og
Os
RsNO

May 5.
20:55 - 21:00 UT.

1995.

because of fairly dense clouds in the W and WNW

02:40 UT nd, y me

- fairly good Aurora in N featuring wide high glow behind dense clouds in N. The clouds were up to about 20° the Aurora was up 40° or more at times. For a while there was a high arc - up about 70°-75°
- photographed the Aurora and also Mars W. of Regulus.

W. May 3 21:00 - 21:05 UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSNO

8:10 - 9:30 p.m. E.D.T. Silver Lake
W.-Th May 3-4 00:10 - 01:30 UT Prov. Park twl ne; 9x63b

Mercury

For 4th night in a row, I went to Silver Lake to see Mercury and the Crescent Moon. Denise went too. We saw Mercury at about 00:50 UT about 40 min. after sunset and about 10° up from the WNW horizon. The crescent moon was far up by now - about 40°-45° above the W. horizon. Mercury was about 2° from the Pleiades, some of which were barely visible in the binoculars. Mercury could also be seen naked-eye
- photographed the western sky.

F. May 5 20:55 - 21:00 UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSNO

F.-S. May 5-6 01:00 - 01:05 UT y twl, cnl 10x25b

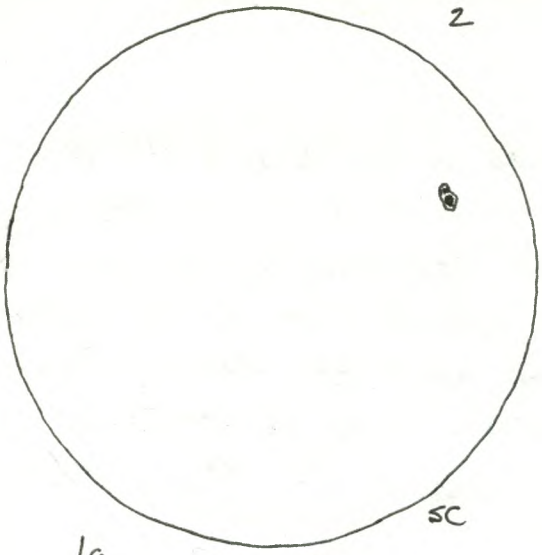
Mercury

Mercury - up 10° in WNW and quite bright; Mars, crescent Moon.

8:45 - 10:00 p.m. E.D.T. Kingston Field
S.-S. May 6-7 00:45 - 02:00 UT at Queens University twl Ast, 19, 8.

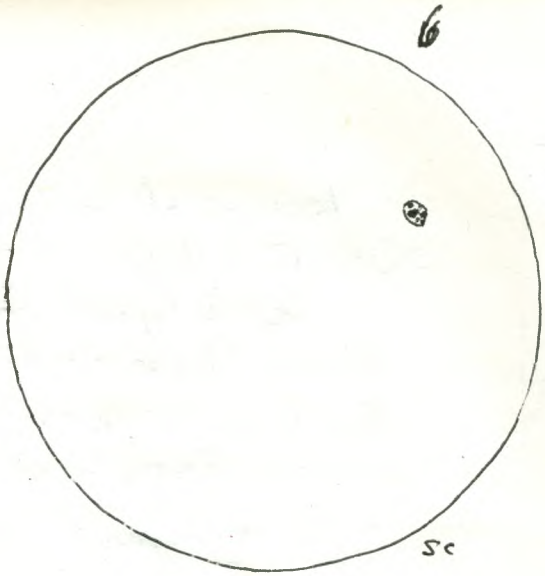
Mercury

Mercury in WNW, Mars, M44, lunar craters on First Quarter Moon, R Leonis, Mizar - good attendance a good collection of about 6 telescopes.



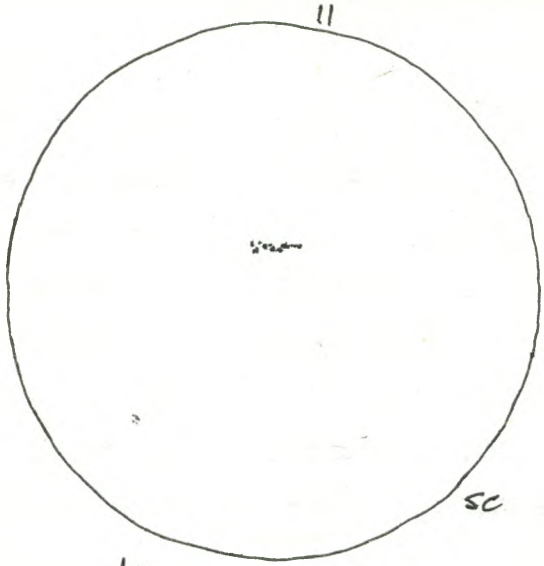
1g
2s
RSN12

May 8
19:10-19:15 UT.



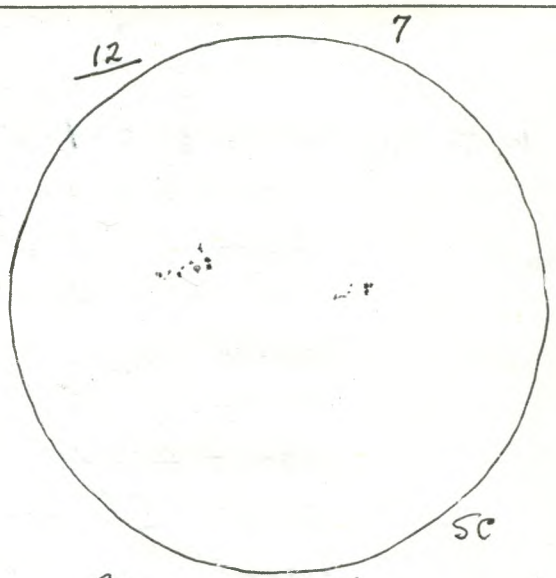
1g
6s
RSN16

May 9
19:55-20:00 UT



1g
11s
RSN21

May 13
20:20-20:25 UT



2g
19s
RSN39

May 15
21:15-21:20 UT

Apr. 7.

11 solar (7 - 0s)

Apr
23-24 - 24 Lyrids
- Aurora

24-25 - Aurora

May 2-3 - Aurora - high arc

Mercury - May 3, 5, 6, 7, 8

Astronomy Day 2 planets, V, Cluster
Double Star

1995

about 8:45 p.m. E.D.T.
S.-M May 7-8 00:45 UT Terry Hicks' place twl ne
Mercury. Denise saw Mercury in the twilight, and I saw it only intermittently or "coming and going", about 3° above a tree as view from the driveway at Terry Hicks' house. Ruth Hicks also saw it. While driving to Sharbot Lake from Kingston, I also tried to see it but was not sure of seeing it. Denise saw it until about the time she was at Parham.

M. May 8 19:10-19:15 UT ss. C-8,32,28,20,15.5.
Sun lg 2s RSN 12

9:10 - 9:30 p.m. E.D.T
M.-T. May 8-9 01:10-01:30 UT y twl 9x63b
Mercury. Mercury in WNW, Mars and Regulas near slightly gibbous Moon.

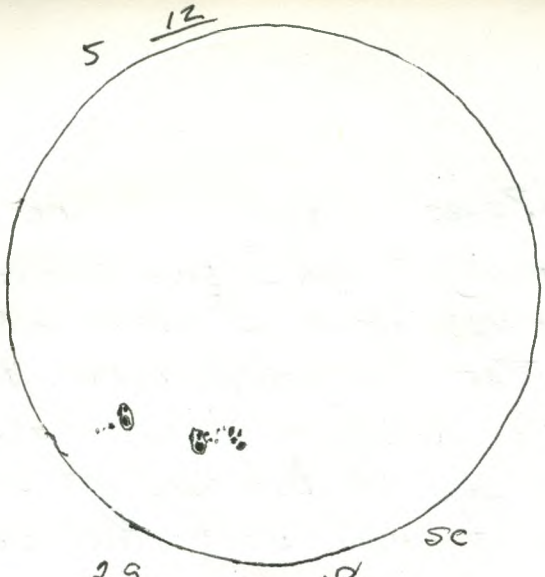
T.-W. May 9 19:55-20:00 UT ss C-8,32,28,20,15.5
sun lg 6s RSN 16

9:15-9:20 p.m. E.D.T. Queens University
F.-S. May 12-13 01:15-01:20 UT twl ne
Mercury. At the Centre meeting at which Paul Boltwood was speaking we went outside to view Mercury if possible. Twilight was quite bright in WNW and I could not be sure of seeing Mercury; although I might have seen it, only for an instant, but could not be absolutely sure.

Sa. May 13 20:20-20:25 UT ss. C-8,32,28,20,15.5
Sun lg 11s RSN 21

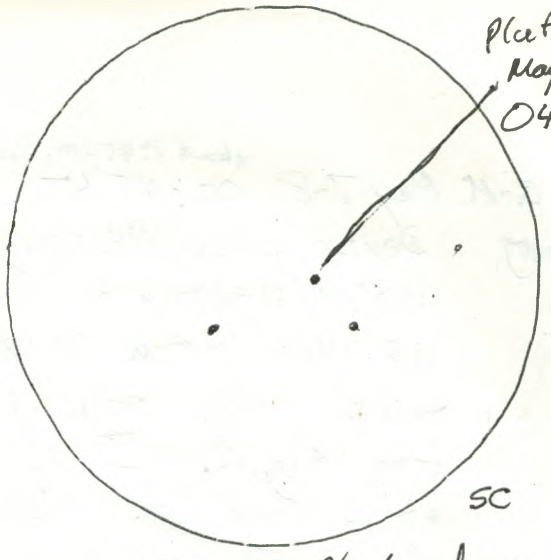
9:50-10:10 p.m. E.D.T
M-T. May 15-16 01:50-02:10 UT y twl, twl 9x63b
Mercury. Mercury in WNW about 8° above horizon.

W.-Th. May 17-18 03:20-03:35 y S-8(?) T 9.5(!) ne
constellations; photography of Mars in Leo, Corvus, Jupiter and Scorpius, Cassiopeia.

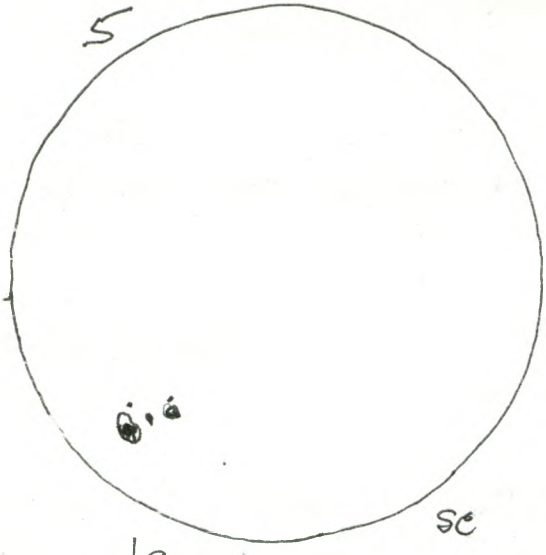


2 g
17 s
RSN 37

May 18
20:00 - 20:05 UT

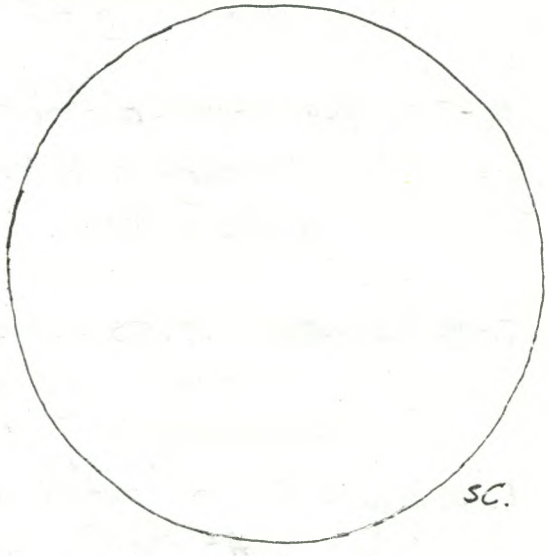


Area of Pluto during observing session May 19-20 04:00-05:00 UT.



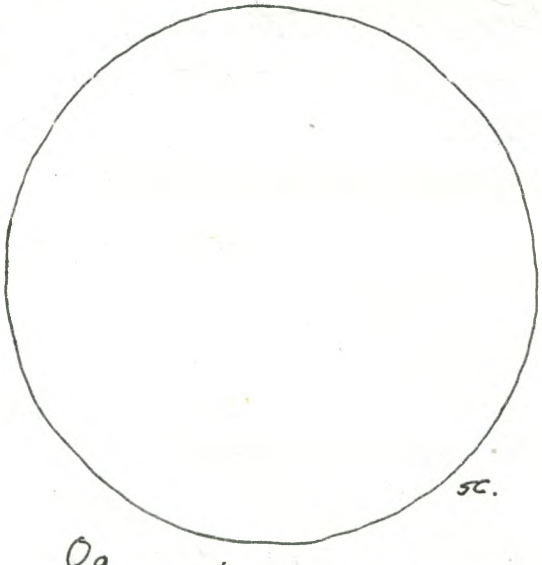
1 g
5 s
RSN 15

May 20
20:25 - 20:30 UT



0 g
0 s
RSN 0

May 22
21:00 - 21:10 UT



0 g
0 s
RSN 0

May 23
19:40 - 19:45 UT.

1995

Th. May 18 20:00-20:05 UT ss C-8, 32, 28, 20, 15.5
sun 2g 17s RSN37

9:20-9:30 p.m. E.D.T.

Th.-F. May 18-19 01:20-01:30 UT y twl 9x63b; 10x25b
Mercury Mercury in WNW up about 10° - not seen for sure naked-eye, but easy in binoculars
03:20-03:30 UT y S8? T8 ne
constellations, and photographed area of Mars in Leo.

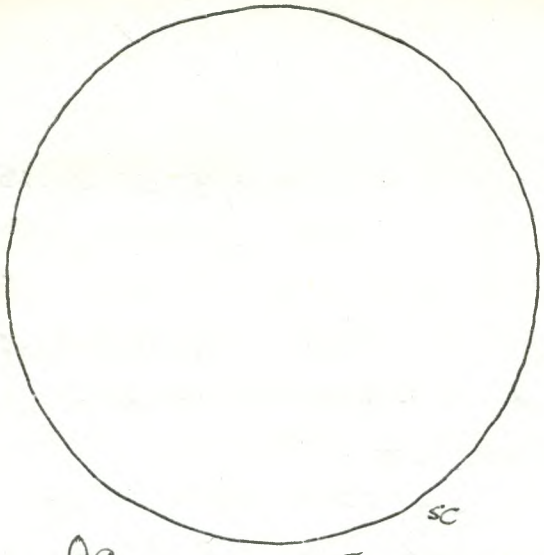
F.-S. May 19-20 01:25-01:28 UT y twl 9x63b.
Mercury Mercury in WNW - easily seen in the binoculars - up about 10° but not seen naked-eye.
03:20-05:00 UT oo S-9T9 C-14, 32, 19.
- photographed area of Mars in Leo.
Pluto observed Pluto at mag 13.7 (See map in S.+T. April, 1995, p. 71) in constellation Libra, by star hopping from ε Ophiuchi (U290). Pluto was at about RA. 16h 00m Dec -6°.2; also observed M13(!), Jupiter and 4 moons, σ Her.

Sa. May 20 20:25-20:30 UT ss. C-8, 32, 28, 20, 15.5.
sun 1g 5s RSN15

M. May 22 21:00-21:10 UT ss. C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

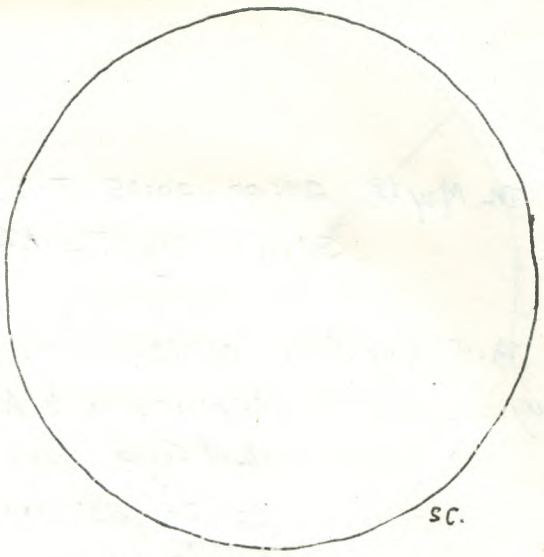
M.-T. May 22-23 03:40-03:45 UT y S-8?T9 ne
- constellations and Mars in Leo near Regulus.
Mercury (Earlier I had seen Mercury in twl. up about 10° in WNW at 01:28 UT.)
- photographed area of Mars in Leo.

T. May 23 19:40-19:45 UT ss C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0



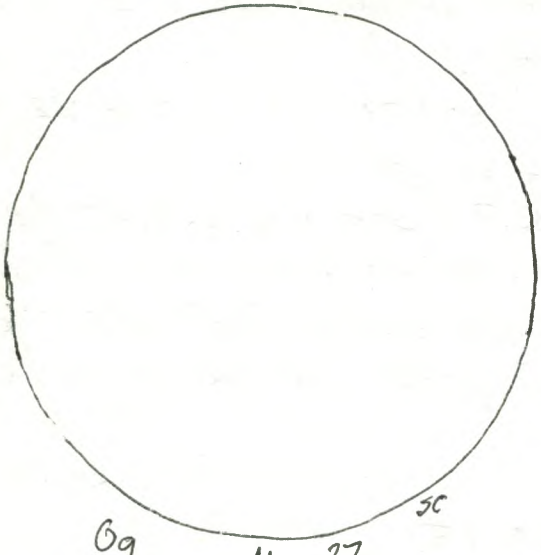
Og
Os
RSNO

May 25
20:20-20:25 UT



Og
Os
RSNO

May 26
20:05-20:10 UT



Og
Os
RSNO

May 27
19:25-19:30 UT

1995

W.-Th. May 24-25 01:55-02:00 y twl 9x63b

Mercury - Mercury in NW - up about 10°

03:40-03:45 UT y s-8(?) T8 (some haze) ne

- constellations, Mars in Leo - past conjunction with Regulus and Jupiter in Scorpius

- photographed area of Mars in Leo.

Th. May 25 20:20-20:25 UT ss C-8, 32, 28, 20, 15.5

sun Og Os RSNO

F. May 26 20:05-20:10 UT ss C-8, 32, 28, 20, 15.5.

sun Og Os RSNO

9:40-9:45 p.m. E.D.T.

F.-S. May 26-27 01:40-01:45 UT y twl 9x63b.

Mercury Mercury in N.W. about 5° above horizon - not seen without binoculars, though Denise said she could see it.

02:30-03:20 UT y s-9(?) T9 ne; 9x63b

ne: Constellations

photographed Mars in Leo and Jupiter in Scorpius.

03:30-04:00 UT y 9x63b

areas of Cepheus, Lyra, Scorpius.

Sa. May 27 19:25-19:30 UT ss C-8, 32, 28, 20, 15.5

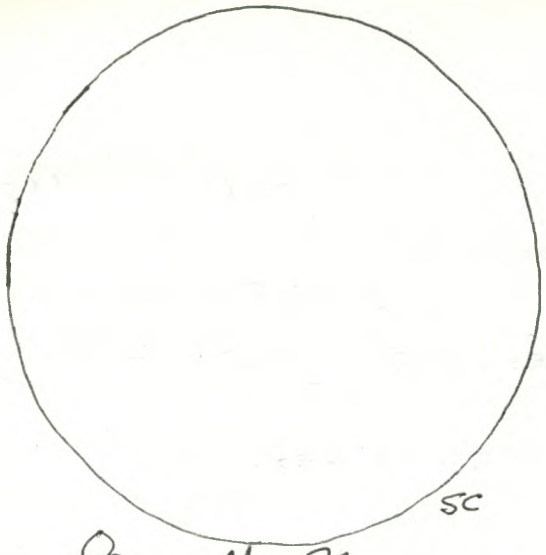
sun Og Os RSNO

Sa.-Su. May 27-28 01:20-01:50 y twl. 9x63b

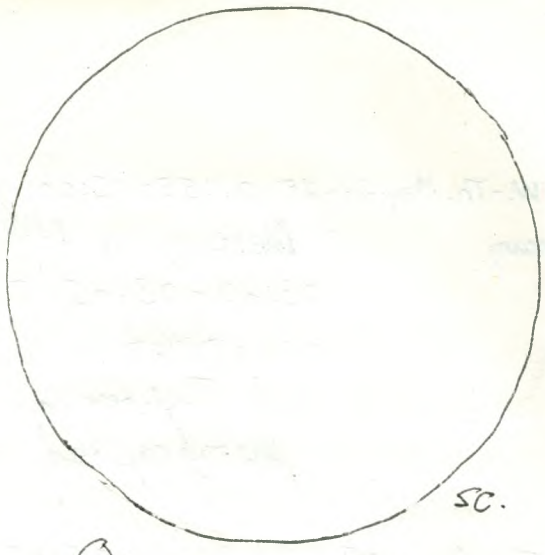
Several times within this time period I searched in the NW for Mercury but did not see it. The area also was somewhat cloudy.

03:10-04:15 UT y s-9 T9 20x100b.

SS Cyg. Jupiter and 3 moons, M80, M12, M10, North America Nebula which could be seen quite well, SS Cyg which seemed to be up to about 8 mag.; β Cyg, Coathanger Cluster, α Lib, β Lib..

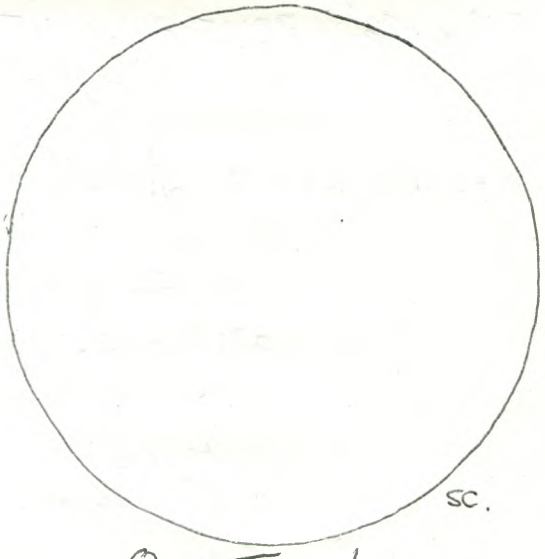


0g
05
RSNO
May 30
20: ~~05~~ -20:10UT

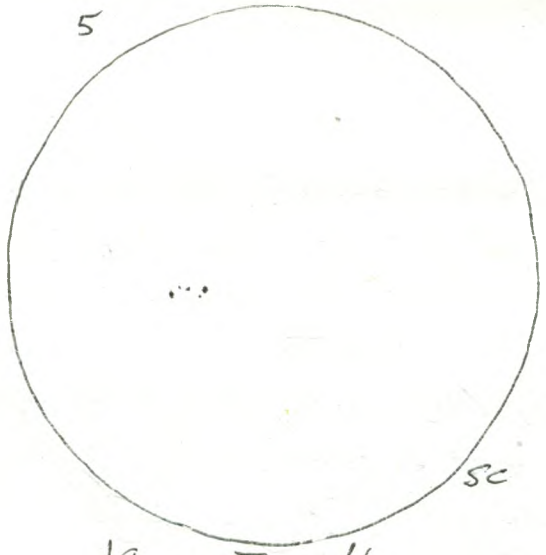


0g
05
RSNO
May 31
19:20-19:25UT

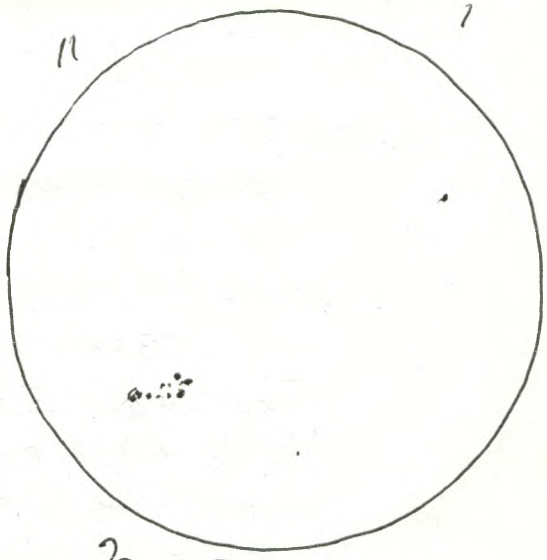
W.-Th. May 31-June 1 01:15UT



0g
05
RSNO
June 1
21:05-21:10UT



1g
5s
RSN15
June 4
19:15-19:20UT



2g
12s
RSN32
June 5
20:35-20:40UT

1995

Tu. May 30 20:05-20:10 UT ss C-8, 32, 28, 20, 15.5
sua 0g 0s RSN 0

T.-W. May 30-31 03:10-03:30 UT y S9(?)T8 ne
constellations; photographed Mars in Leo and Jupiter in Scorpius.

W. May 31 19:20-19:25 UT ss C-8, 32, 28, 20, 15.5
sua 0g 0s RSN 0

9:15 p.m. E.D.T.

W.-Th. May 31-June 1 01:15 UT y twl ne
slender crescent moon seen in WNW.
Moon was 2 days 15 hours 48 minutes old.

Th. June 1 21:05-21:10 UT ss C-8, 32, 28, 20, 15.5
sua 0g 0s RSN 0

Su. June 4 19:15-19:20 UT ss C-8, 32, 28, 20, 15.5
sua 0g 5s RSN 15

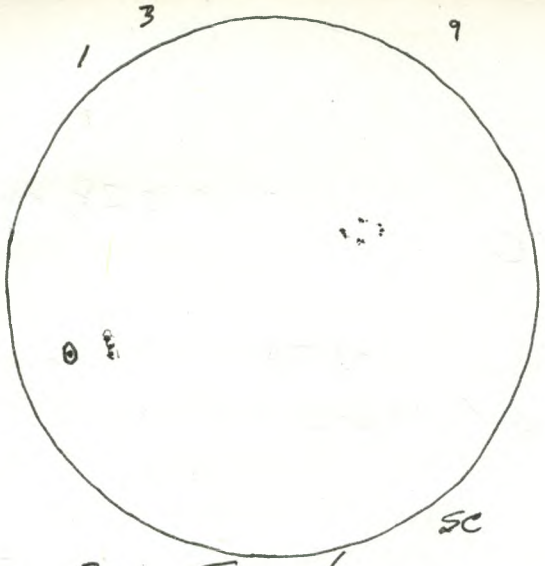
M. June 5 20:35-20:40 UT ss C-8, 32, 28, 20, 15.5
sua 2g 12s RSN 32

T. June 6 21:30-21:35 UT C-8, 32, 28, 20, 15.5
sua 3g 13s RSN 43

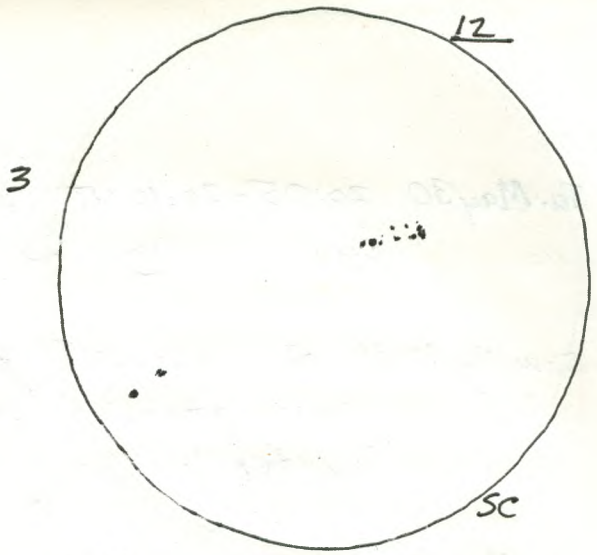
W. June 7 19:40-19:45 UT ss C-8, 32, 28, 20, 15.5
sun 2g 15s RSN 35

Th. June 8 19:25-19:30 UT ss C-8, 32, 28, 20, 15.5
sua 2g 11s RSN 31

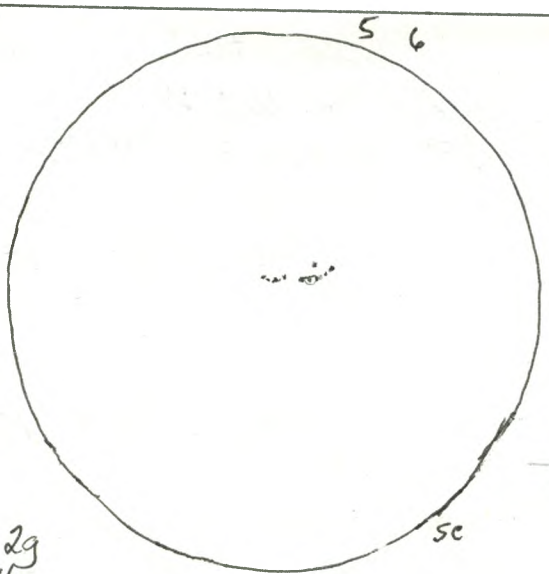
F. June 9 19:30-19:35 UT ss C-8, 32, 28, 20, 15.5
sua 1g 21s RSN 31



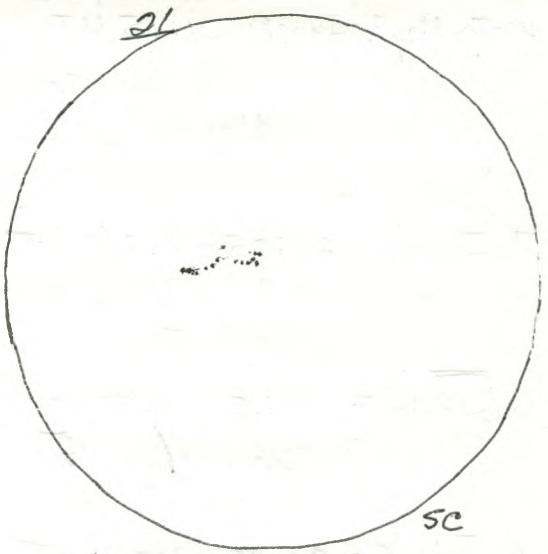
3g
13s
RSN43
June 6
21:30-21:35



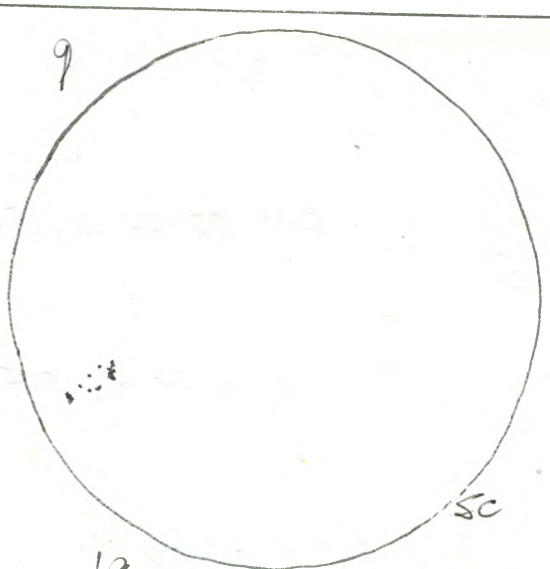
2g
15s
RSN35
June 7
19:40-19:45 UT



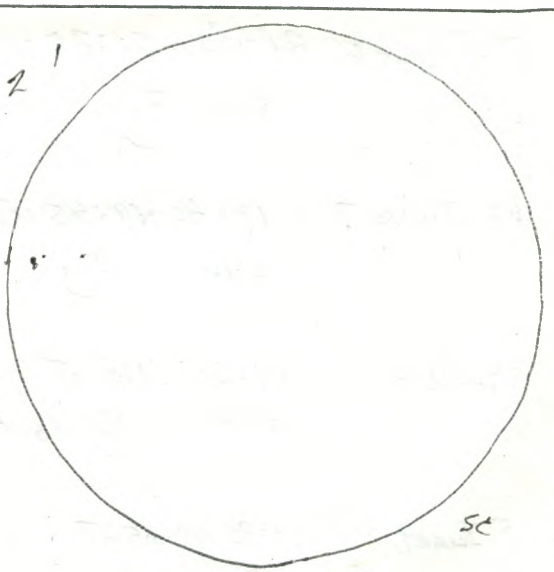
2g
11s
RSN31
June 8
19:25-19:30 UT



1g
21s
RSN31
June 9
19:30-19:35 UT



1g
9s
RSN19
June 12
19:50-19:55 UT



2g
3s
RSN23
June 13
19:15-19:20 UT

1995

M. June 12 19:50-19:55 UT ss C-8, 32, 28, 20, 15.5
sun 1g 9s RSN19

M.-T. June 12-13 00:45-00:50 UT sh twl me
- watched moon move above treeline in SE - about 20 min after moonrise and about 3h 18m before time of Full Moon (at 04h 03m UT) It was about the time of sunset. The moon also was very near perigee - being listed as happening at 01h UT and the nearest perigee (357,009 km) of the year.

Tu. June 13 19:15-19:20 UT ss C-8, 32, 28, 20, 15.5
sun 2g 3s RSN23

W. June 14 20:05-20:10 UT ss. C-8, 32, 28, 20, 15.5.
sun 0g 0s RSN0

F. June 16 19:15-19:20 UT ss. C-8, 32, 28, 20, 15.5.
sun 0g 0s RSN0

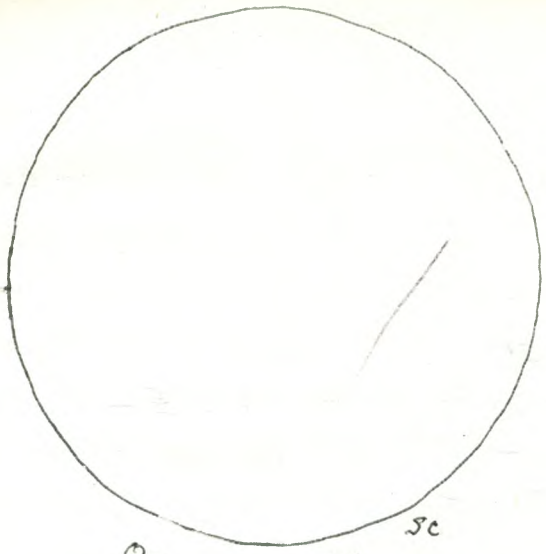
Sa. June 17 19:35-19:40 UT ss. C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

Su. June 18 17:30-17:35 UT ss C-8, 32, 28, 20, 15.5
sun 0g 0s RSN11

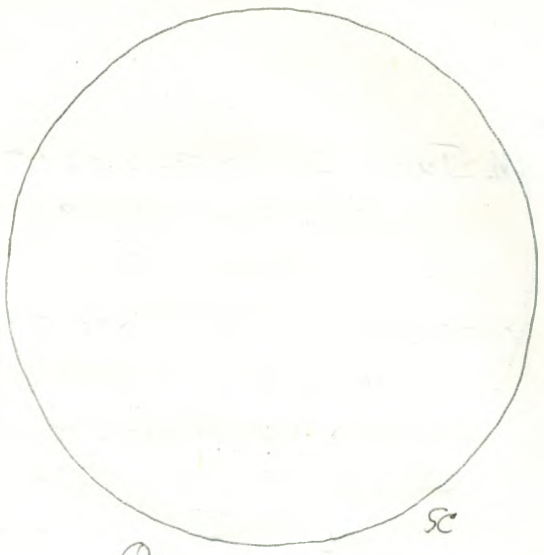
M. June 19 18:15-18:20 UT ss C-8, 32, 28, 20, 15.5.
sun 1g 2s RSN12

Tu. June 20 20:10-20:15 UT ss C-8, 32, 28, 20, 15.5
sun 1g 2s RSN12.

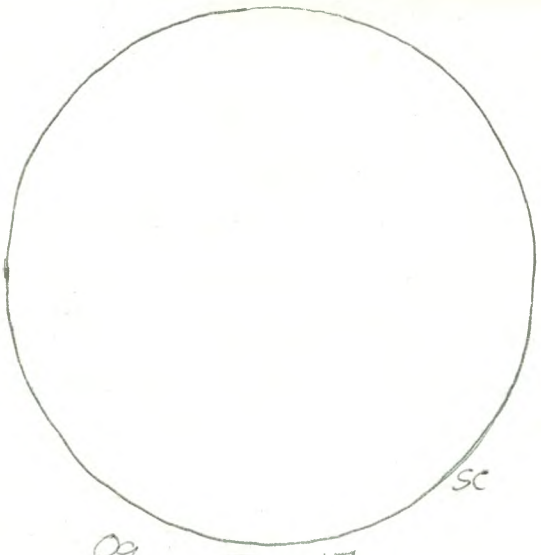
W. June 21 19:20-19:25 UT ss C-8, 32, 28, 20, 15.5
sun 1g 2s RSN12.



0g
0S
RSNO
June 14.

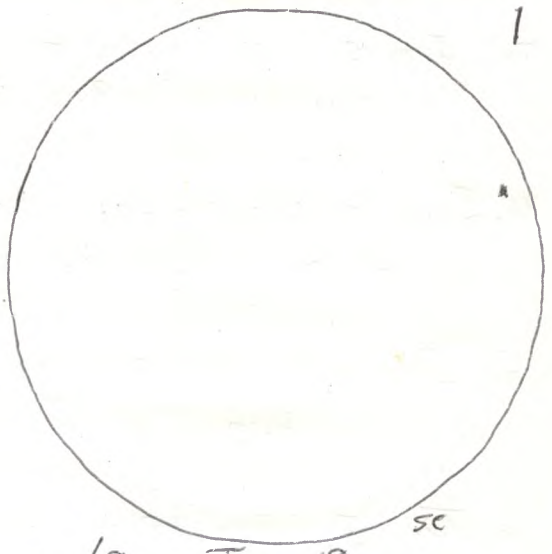


0g
0S
RSNO
June 16
19:15-19:20 UT



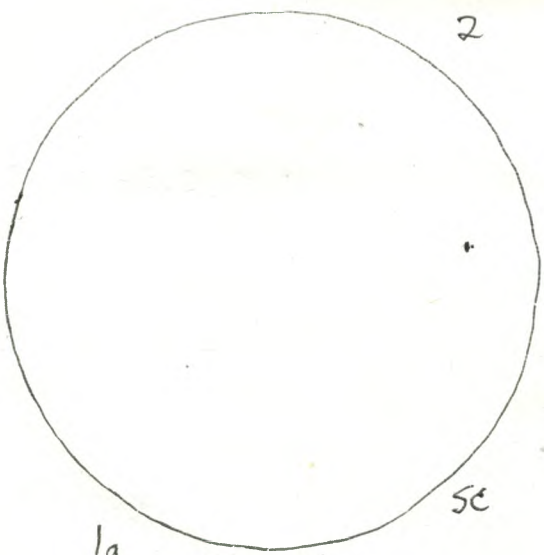
0g
0S
RSNO
June 17
19:35-19:40 UT

1



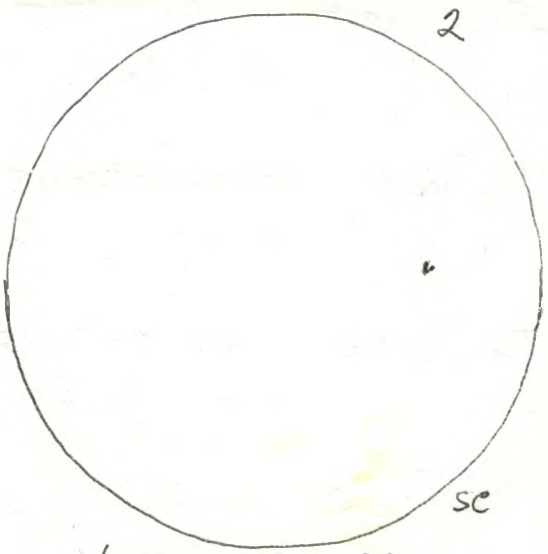
1g
1S
RSN11
June 18

2



1g
2S
RSN12
June 19
18:15-18:20 UT

2



1g
2S
RSN12
June 20
20:10-20:15 UT

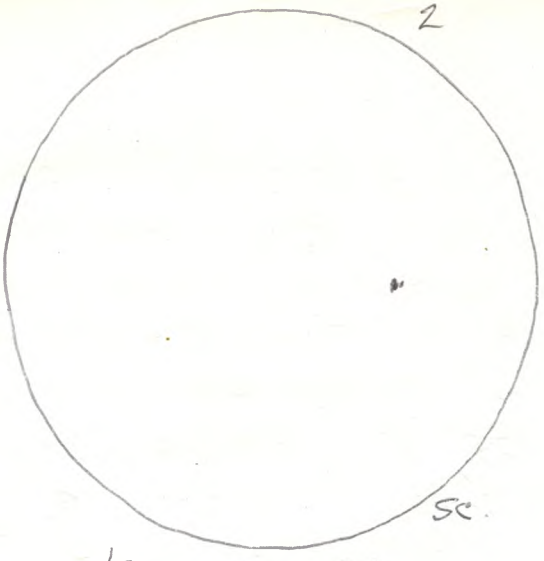
1995 W.-Th. June 21-22 03:20-04:40UT y 3 9(?)T 8.5 (haze) 20x100b

Jupiter and 3 of its moons, Europa (II) was not noticed because it had just reappeared from an occultation and eclipse and was still close to the planet. M4, M80, quick view of one of the globulars in Ophiuchus - probably M10, M22, M28, M16, M17, M18, M25, M11, R Scuti and area, areas in Cygnus - North America Nebula area, ε Cyg, W Cyg, CP Cyg, 75 Cyg and area near SS Cyg, but did not see SS Cyg (U85 and U86), and area near γ Cyg - P Cyg and area, χ Cyg and area, area of Cyg X-1 near η Cyg - (See U119)

There was a certain amount of haze throughout the observing session and a very slight redness in the sky noticeable in areas near the horizon where there was some light pollution. This was probably due to particles in the atmosphere from the forest fires in Northern Manitoba and Northwestern Ontario. Smoke was reported to have caused redness in the appearance of the moon or sun - on a television report. There was a report that 100 new forest fires had started the previous night in Northern Manitoba. The total number in the west was supposed to have been about 400. Therefore, it was possible that the transparency could have been affected by about 1 magnitude.

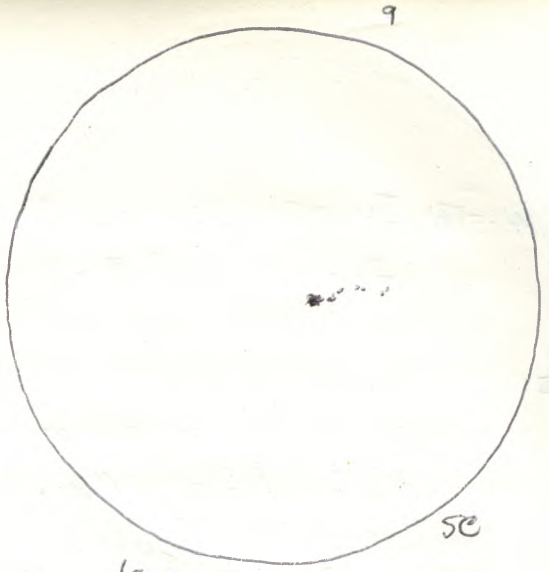
Fr. June 22 20:30-20:35UT SS C-8, 32, 28, 20, 15.5.
sun 1g 9s RSN19

Th.-F June 22-23 02:40-04:30UT 00 5-9(?)T 8-8.5 C-14, 32 20x100b.
C-14: Jupiter and 4 moons, ε Her, M13, NGC6207 near M13, M57
20x100b: R CorBor, T CorBor, M16, M17, M18, M22, M28, M8, M20, M11 and R Scuti
Several meteors, one of which might have been



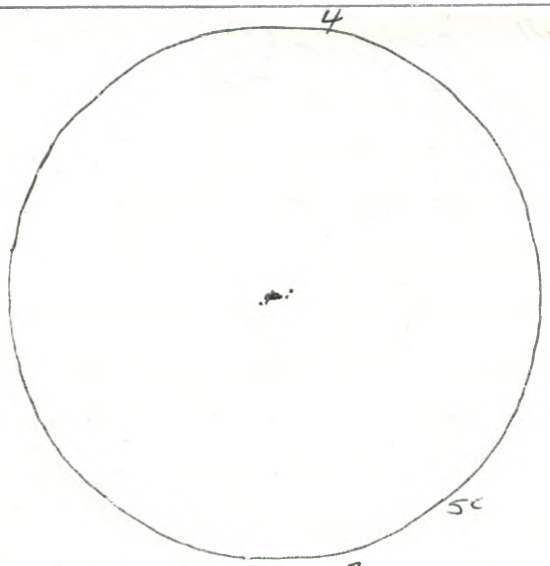
1g
2s
RSN12

June 21
19:20-19:25 UT



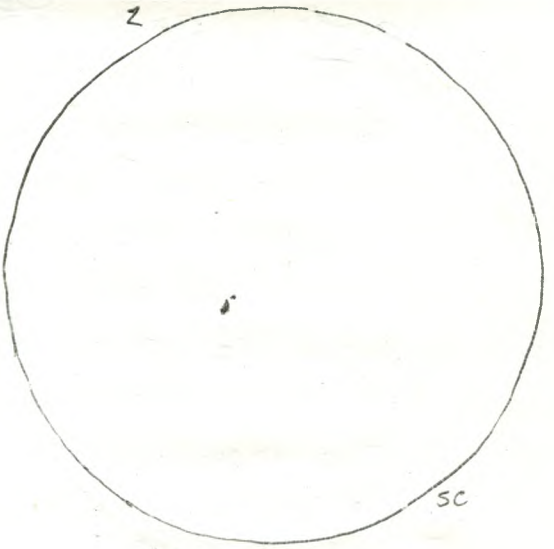
1g
9s
RSN19

June 22
~~20~~:30-~~20~~:35



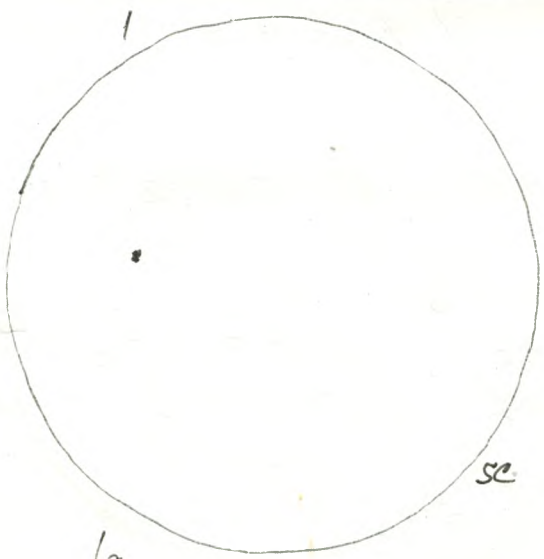
1g
4s
RSN4

June 23
19:45-19:50 UT



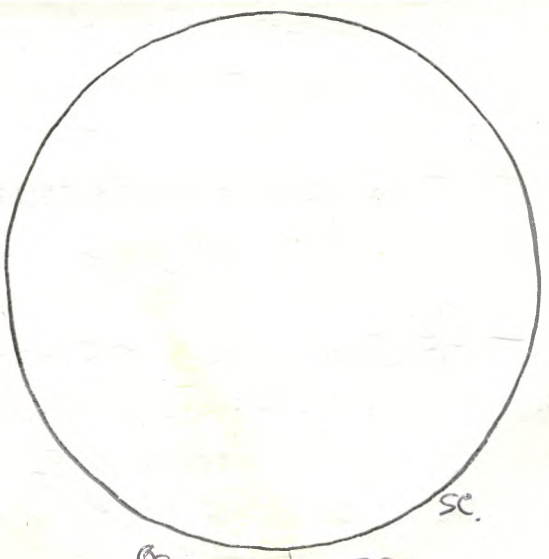
1g
2s
RSN12

June 25
19:40-19:45 UT



1g
1s
RSN11

June 26
20:00-20:10 UT



0g
0s
RSN0

June 28
20:40-21:00 UT

1995

a Perseid. The hazy conditions persisted because of smoke in the atmosphere. The transpareacy was probably affected by about 1 magnitude.

F. June 23 19:45-19:50 UT SS C-8, 32, 28, 20, 15.5
Sun lg 45 RSN14

F.-S. June 23-24 04:30-06:00 UT y S-8·9(?)T9 20x100b.
Jupiter, M22, M28, M16, M17, M18, M24, M23, M11 and R Scuti, area of γ Cyg, P Cyg, χ Cyg, area of Cygnus X-1, area of SS Cyg, M15, UGC 7789.
There was one meteor which might have been a Perseid. The transparency was better than the previous two nights, the effect of the Manitoba forest fires apparently not so bad.

Sa.-Su. June 24-25 04:20-05:00 UT y S-8(?)T8-8.5 (some cloud) ne
~~Scintillation~~ Constellations; one faint meteor.

Su. June 25 19:40-19:45 UT SS C-8, 32, 28, 20, 15.5
Sun lg 25 RSN12

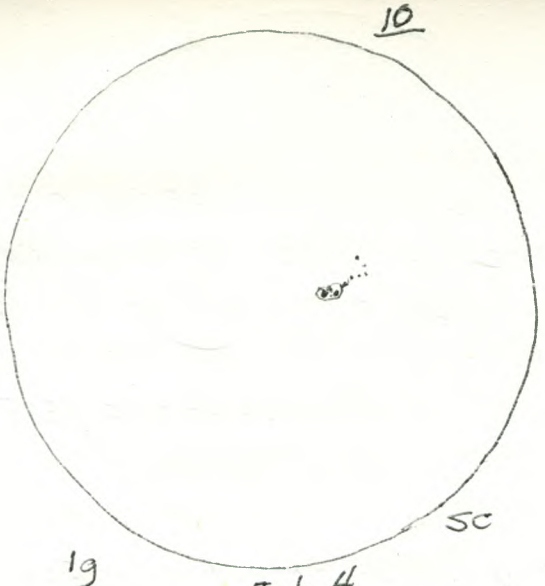
M. June 26 20:00-20:10 UT C-8, 32, 28, 20, 15.5
Sun lg 15 RSN11 - Some haze & cloud present

W. June 28 20:40-21:00 UT SS C-8, 32, 28, 20, 15.5
Sun 0g 0s RSN0 Some cloud interrupted viewing.
It was slightly hazy also.

Tu. July 4, 20:00-20:05 UT SS C-8, 32, 28, 20, 15.5
Sun lg 105 RSN20.

T.-W. July 4-5 03:35-04:45 UT 00 S-8-9; T7-8 (haze) C-14, 32, 19 20x100b
C-14: Jupiter and 3 moons: Europa, Io, and Ganymede the last of which was seen just after completing

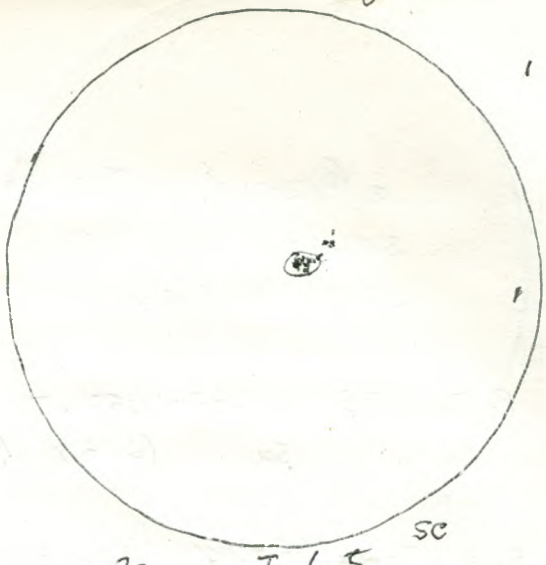
10



1g
10s
RSN20

July 4
20:00–20:05UT

8

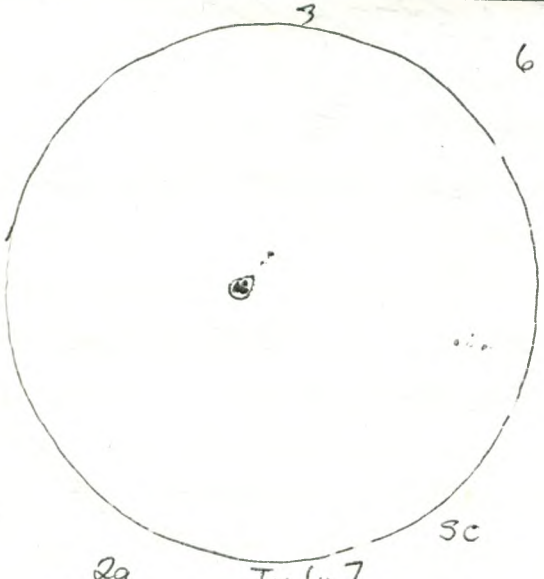


2g
9s
RSN29

July 5
18:00–18:05UT

3

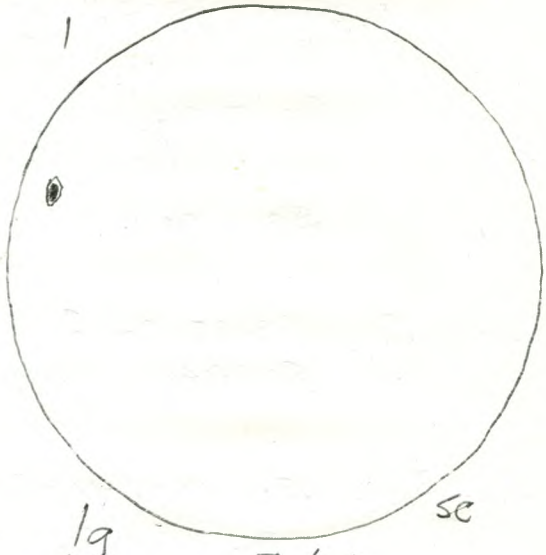
6



2g
9s
RSN29

July 7
17:05–17:10UT

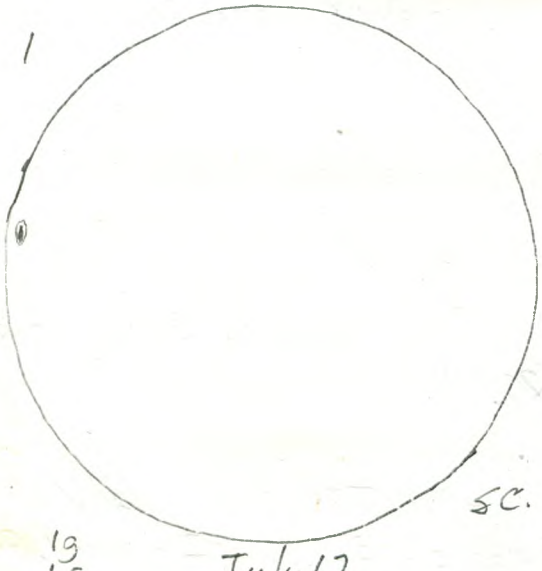
1



1g
1s
RSN11

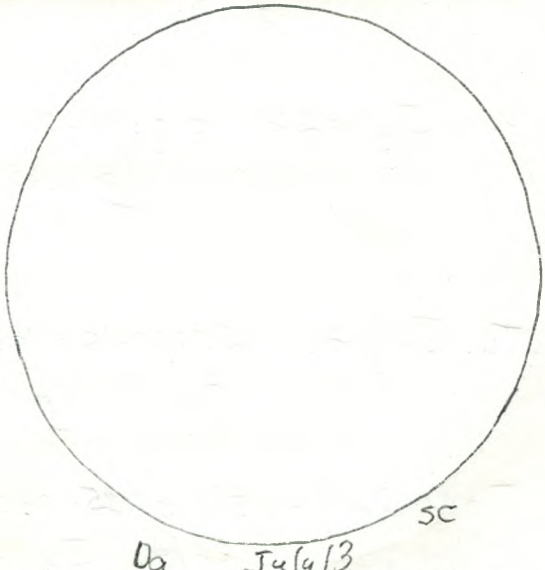
July 11
19:25–19:30UT

1



1g
1s
RSN11

July 12
18:55–19:00UT



0g
0s
RSN0

July 13
18:35–18:40UT

its Transit Egress, which was listed as happening at 03:12 UT
I did not particularly notice Callisto which was considerably
further out on the other side. -also M13, NGC6207
nearby, M57
20x100b: Jupiter and 2 moons: Europa and Io; area of
SSCyg, area of γ Cyg - ρ Cyg, χ Cyg, M22, M4
Hazy conditions prevented my seeing many objects.

W. July 5 18:00-18:05 UT SS C-8, 32, 28, 20, 15.5
sun 2g 9s RSN29

F. July 7 17:05-17:10 UT SS C-8, 32, 28, 20, 15.5
sun 2g 9s RSN29 (Considerable wind interfered.)

Tu. July 11 19:25-19:30 UT SS C-8, 32, 28, 20, 15.5
sun 1g 1s RSN11

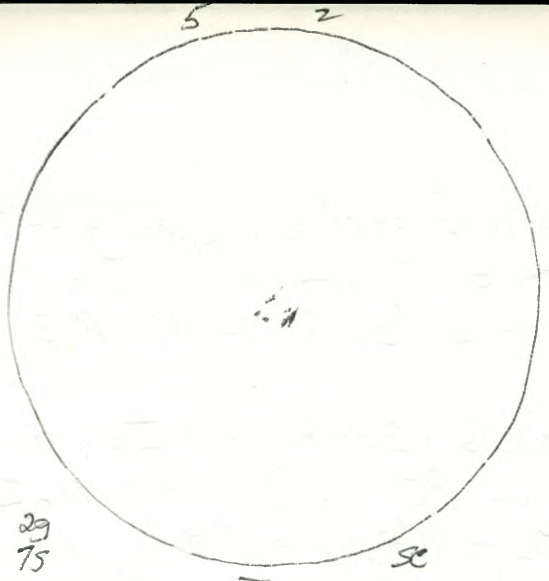
W. July 12 18:55-19:00 UT SS C-8, 32, 28, 20, 15.5
sun 1g 1s RSN 11

Th. July 13 18:35-18:40 UT SS C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

F. July 14 19:35-19:40 UT SS C-8, 32, 28, 20, 15.5.
2g 7s RSN27

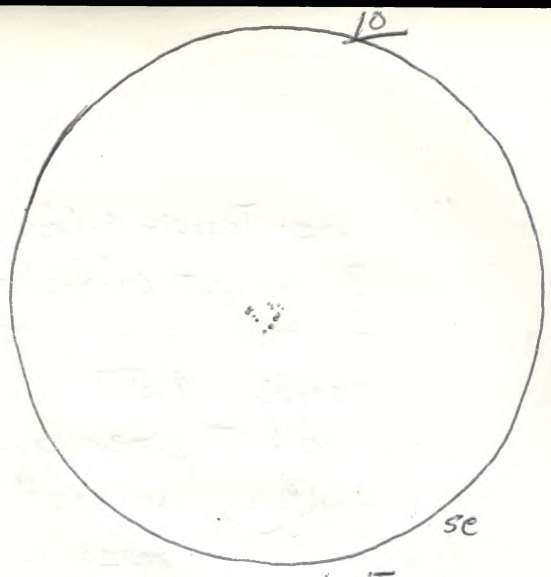
Sa. July 15 19:15-19:20 UT SS C-8, 32, 28, 20, 15.5
1g 10s RSN20

Sa-Su July 15-16 03:15-04:10 UT y gml ne; 9x63b.
ne: Jupiter and summer constellations
9x63b: R CorBor, M8, M13, Alcor and Mizar, Col399,
Cygnus areas, ε Lyrae.



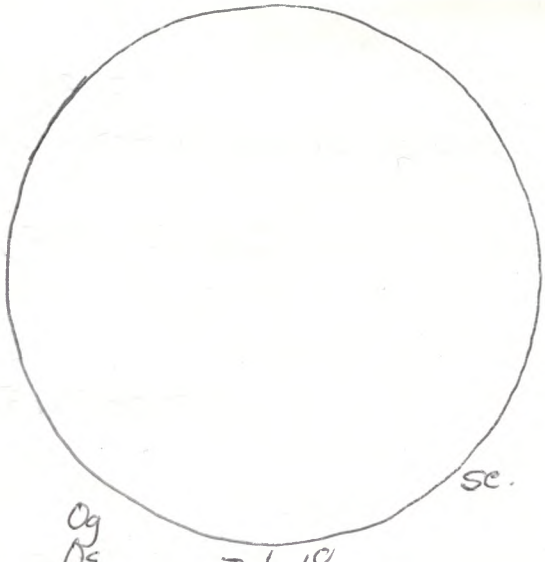
2g
7s
RSN27

July 14
19:35-19:40UT



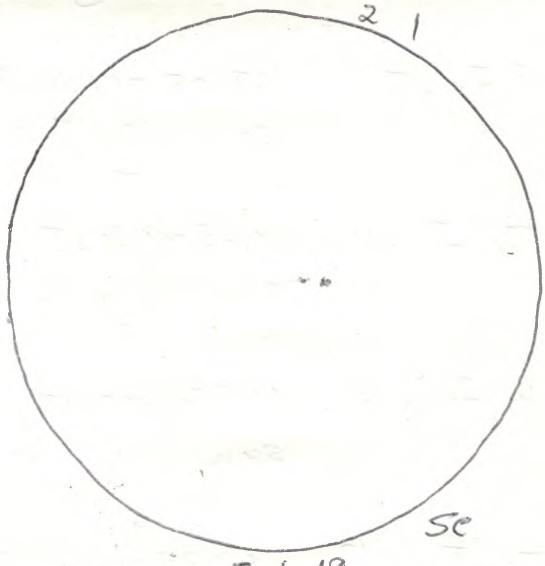
1g
10s
RSN20

July 15
19:15-19:20UT



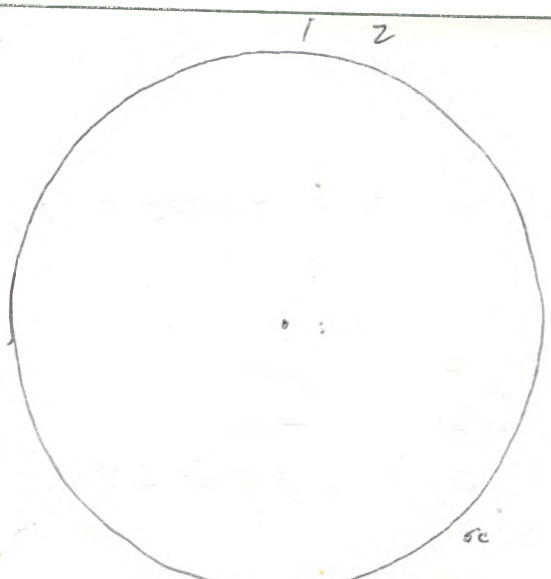
0g
0s
RSN0

July 18
19:45-19:50UT



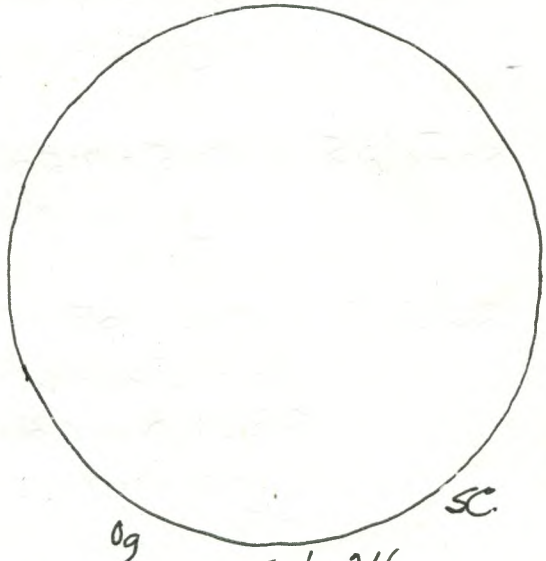
July 19
19:15-19:20UT

2g
3s
RSN23



2g
3s
RSN23

July 20
19:35-19:40UT



0g
0s
RSN0

July 24

1995

M-T. July 17-18 03:00-04:20 UT y S-8(?) T9 20x100b
Uranus and Neptune in Sagittarius (See U342 and U343. Uranus - at R.A. $20^h 4^m$ Dec. $-21°$; Neptune - at R.A. $19^h 44^m$ Dec. $-20°.8$) M22, M28, M4, M80, M16, M17, M18, M8, M20, M21, area of γ Cyg, ρ Cyg, χ Cyg, area of North America Nebula, area of 55 Cyg, T Cor Bor, R Cor Bor, Jupiter and 3 of its moons, M75 in area near Uranus
- observed until after moonrise

Tu. July 18 19:45-19:50 UT 5s C-8, 32
Sun 0g 0s RSN0 considerable cloud interference.

T-W. July 18-19 03:15-04:30 UT y S-8 T-9 but clouds moved in 20x100b
Jupiter, M4, M16, M17, M18, M8, M20, M21, M28, M22, Uranus area near Sagittarius-Capricornus area but was not sure of seeing it - tree interfered with part of area, Neptune, area of Deneb.
- bright meteor - short trail - about 5° - Moving S. to N, near the zenith - about mag. -1
- Clouds moved in and made observing frustrating.

W. July 19 ~~03~~ 19:15-19:20 UT 5s C-8, 32, 28, 20, 15.5
Sun 2g 3s RSN23

W-Th. July 19-20 03:30-04:40 UT y S-8 (?) T8-9 scattered cloud ne; 9x63b
ne: Constellations, two meteors going N. to S.
9x63b: M22, M11, R Scuti - very faint for the binoculars, IC4665, area of Deneb and γ Cyg, ρ Cyg, χ Cyg, M15, stars of Delphinus, α Del and ε4 Del, M31

Th. July 20 19:35-19:45 UT 5s C-8, 32, 28, 20, 15.5
Sun 2g 3s RSN23

1995 F.-S. July 21-22 01:45-04:45 UT Darling Hill S.A.S. site (5-8-9; T8.5) Cave 16" 20x100b

Cave 16": Saturn - ghost ring - back lit - barely visible but visible - "ghostly" - along with 4 moons close to the disk and Titan considerably distant from the planet

20x100b: M22, M28, M11 and R Scuti - very faint at mag. 8.5, SU Sag, Uranus, Neptune, Barnard's Star, R Cor Bor, T Cor Bor, area of SS Cyg, M31, NGC 7789, M51, IC 4665

Dieter Brust

S.-M. July 23-24, 03:30-04:45 UT Y 5-8-9?/T9.5! 20x100b

- Jupiter and 4 moons - all east of the planet, Uranus, Neptune, SU Sag, area of Barnard's Star, area of δ Cephei (easily split - 40."7 - mag 4 and 6.3) (See U57), the 3 small clusters in area of δ, ε and ζ Cephei - NGC 7281, 7261, and 7235, also μ Cep - the Garnet Star and nearby bright nebulosity IC 1396 - part of which could be seen faintly, Krueger 60, near δ Cep. - a

6210 nearby double star - see Burnham p. 598., NGC 6210 - PN not far from β Her - U156 - easily seen - mag. 9.3,

6712 NGC 6712 - small globular in Scutum S. of M11, and

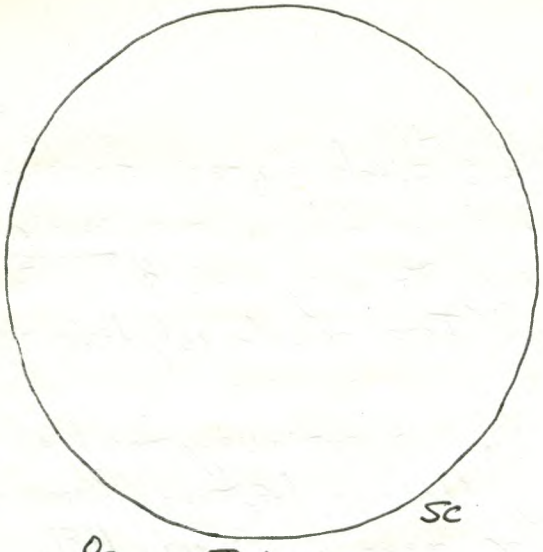
S Scu near variable star S Scuti - U295; NGC 6633

6633 in southern Ophiuchus near large cluster IC 4756 in northern Serpens Cauda - U205 - Both are large

6572 bright clusters; NGC 6572 - bright PN in Oph near 71 and 72 Oph - U204; looked for but was not sure of seeing NGC 6369 - a PN in Oph - See U338;

7789 NGC 7789 - OC in Cas

M. July 24 22:15-22:20 UT SS C-8, 32, 28, 20, 15.5
Sun Og Os RSNO (diagram - opposite previous page!)



Og
OS
RSNO July 26
17:40-17:45 UT

Og
OS
RSNO July 27
7:05-17:10 UT

1995

M.-T. July 24-25 03:30-05:30UT 00 S-8 T8-9 C-14,32 ; 20x80b

C-14: M57 - also tried unsuccessfully to see the central star using 4mm ocular (978x) and 5mm ocular (782x); tried to observe Saturn with the rings almost edge-on, but by then it was very cloudy in that area of the sky and it was not seen well.

20x100b: M8, M20, M28, M16, M17, M18, M21, Neptune, area near Uranus, M31, M32, M110, Barnard's Star in Ophiuchus, M11 and R Scuti - considerably fainter than usual

Conditions deteriorated considerably especially in S. as clouds moved in.

W. July 26 17:40-17:45UT 55 C-8,32,28,20,15.5

sun Og OS RSNO

Th. July 27 17:05-17:10UT 55 C-8,32,28,20,15.5

sun Og OS RSNO

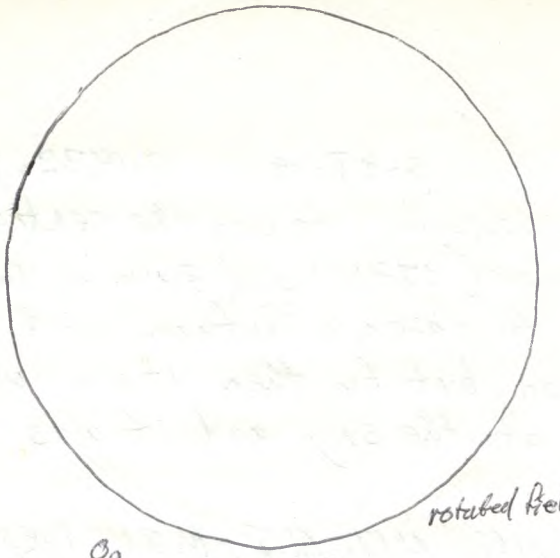
Th.-F. July 27-28 02:00-03:30UT Huronia Star Party near Allistan somewhat cloudy ne

- quite cloudy - very little observing after the informal talks in the big tent at the Huronia Star Party

F.-S. July 28 03:30-04:45 H.S.P S-8? T8-9 a 4" refractor and 8" f/6 reflector

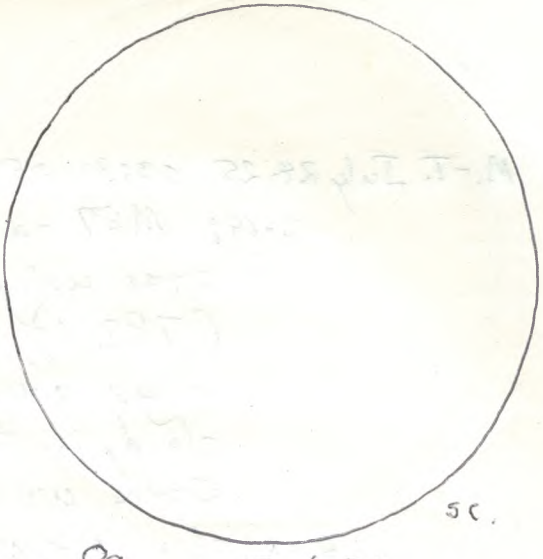
- After a day that had a mixture of hot ~~clear~~ cloudy weather and some fierce storms and high wind gusts and after evening talks by Ivan Semeniuk on What We Have Learned From Hubble and by me on Solar and Lunar Eclipses, we had fairly good weather for observing. Brian Colville of the South Simcoe Amateur Astronomers led a group introduction to the sky and I joined and helped him a bit.

- observed M8, M13, Jupiter and several other objects.



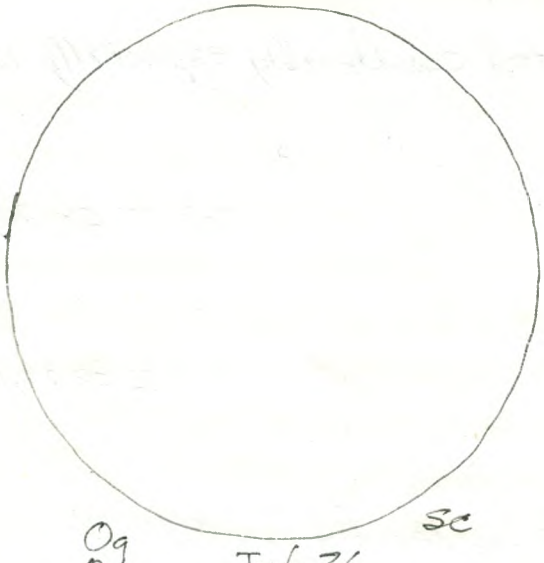
Og
Os
RSN

July 29
about 17:00 UT



Og
Os
RSNO

July 30
22:55-23:00 UT



Og
Os
RSNO

July 31
18:55-19:00 UT

1995.

Sa. July 29 about 17:00 UT H.S.P. a 4" (?) refractor
sua Og Os RSNO

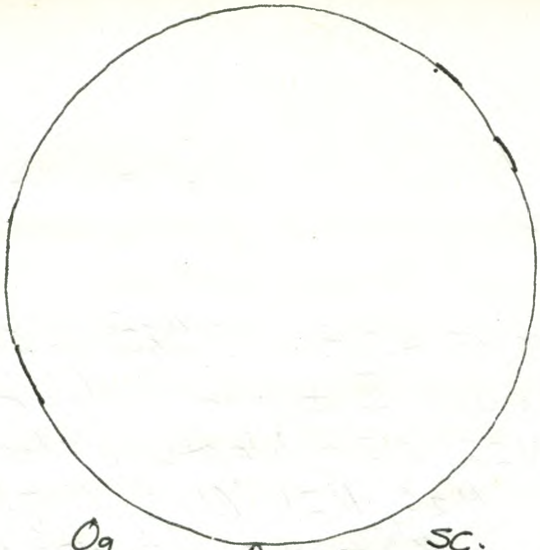
Sa-Su. July 29-30 02:30-04:40 UT H.S.P. - my 20x100b
- other telescopes
20x100b: I showed John and Suzanne Kidder a number of objects: M22, M28, Neptune, Uranus area but not sure of it, M20, M21, M16, M17, M18, M24, M23, M25, M11 and R Scuti, M31, M32, M110, M57, NGC7789, M10, M12, Barnard's Star, T CorBor, R CorBor
other telescopes: I also observed with others who were observing at H.S.P. - including a 10" Meade and a 6" refractor - observed Jupiter, M11, and other objects

Su. July 30 ~~22~~:55-23:00 UT nd C-8, 32, 28, 20, 15.5
sua Og Os RSNO.

S.-M. July 30-31 04:30-06:00 UT y S-8 T 9-9.5(!) 20x100b C-8, 32, 12, 7.4
20x100b - M22, M28, M11, R Scuti, M16, M17, M18, M24, M8, M20, M21, Uranus, Neptune, M31, M32, M110, NGC7789, Double Cluster, T CorBor, R CorBor, Barnard's Star, M33, area of SS Cyg, M75
C-8, 32, 12, 7.4: Saturn - rings not seen because of being almost perfectly edge-on, Titan and one other faint moon seen.

M. July 31 18:55-19:00 UT SS C-8, 32, 28, 20, 15.5.
sua Og Os RSNO

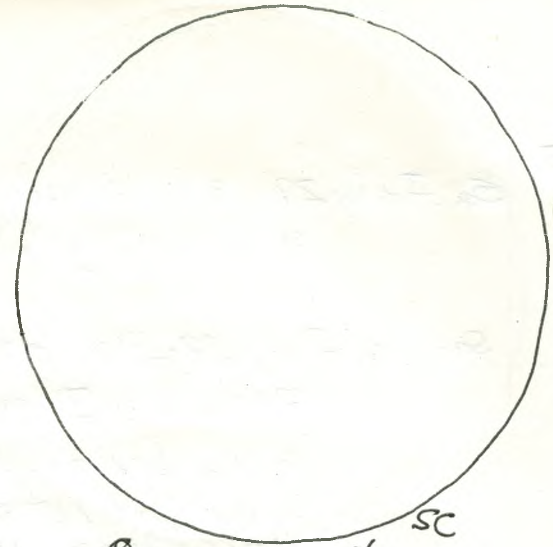
M.-T. July 31-Aug. 1 02:45-07:10 UT oo S-8 T 9.5! 20x100b; C-14, 32KO, 32-2, 12
20x100b: Jupiter, M14, M80, M7, M6, M8, M29, M21, M23, M16, M17, M18, M24, M11 and R Scuti - still fainter than other 3 nearby stars, M33, M31, M32, M110, Barnard's Star, area of PN - NGC6369 in Oph, but not sure of seeing it, NGC6818 - PN in Sgr, NGC 6940 - PN in Vul, NGC 7662 -



sc.

0g
0s
RSN0

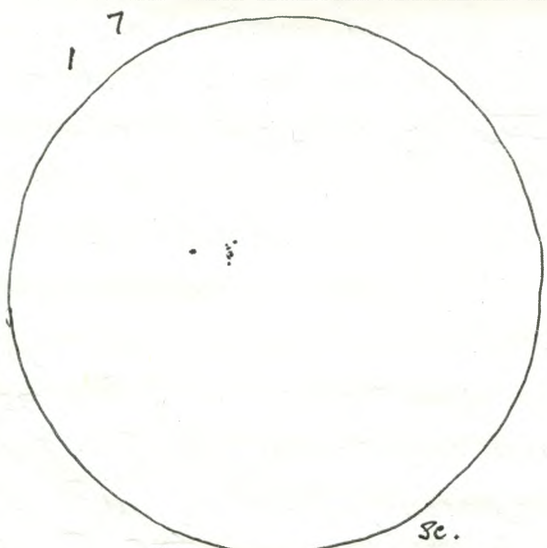
Aug 2
20:25-20:30UT



SC

0g
0s
RSN0

Aug. 4
19:15-19:20UT



sc.

2g
8s
RSN28

Aug.6
20:55-21:00UT

1995

PN in And.

C-14: NGC891 - very spindle-like; NGC772 a diffuse galaxy near γ Arietis; Saturn and two moons, but rings not visible beyond the disk of the planet, though bands or rings visible on disk of planet, M57.

W. Aug. 2 20:25-20:30 UT ss C-8, 32, 28, 20, 15.5.
Sun Og Os RSN some cirrus cloud

W.-Th. Aug 2-3 04:10-05:00 UT nd s-8(?) T-7-8 some clouds ne clearing
- observed meteors seeing about 7 or 7 Perseids and several sporadics. One sporadic was about mag. -3.

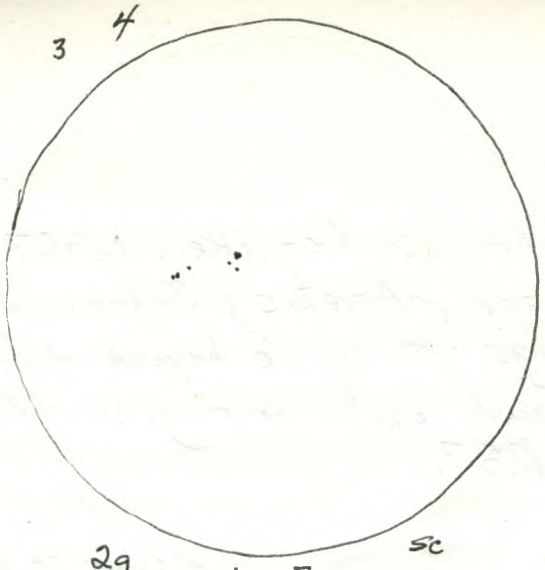
F. Aug. 4 19:15-19:20 UT ss C-8, 32, 28, 20, 15.5.
sun Og Os RSNO

F.-S. Aug. 4-5 02:30-03:40 UT y s-?T5 much scattered cloud 9x63b
- areas in Cygnus, Aquila, Sagittarius, and Hercules; and some other areas including some in Pegasus and ~~Cassi~~ Cepheus. - one bright Perseid meteor about mag. -1.

Su. Aug. 6 20:55-21:00 UT ss C-8, 32, 28, 20, 15.5
Sun 2g 8s RSN 28

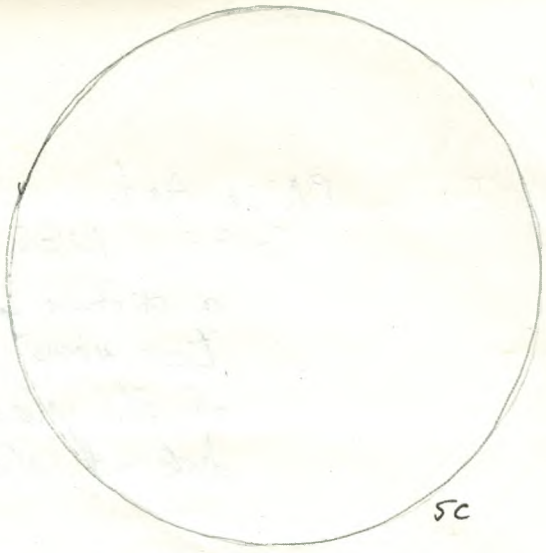
Su.-M. Aug. 6-7 01:30-02:40 UT y, t s-8.5 gml ne; c8, 32, 19, 12, 7.4
ne: constellations, looked for Perseids; saw one and several other meteors
C-8: Cor Caroli, Jupiter and 4 moons - bands quite clear, Mizar and Alcor
04:20-05:00 UT floor of observatory gml C-8, 19, 12, 7.4, 4.
rings of ~~Saturn~~ - not seen at all but Saturn was seen - but not too well - perhaps because of moonlight. Titan and one other moon seen. - only about 3 days until Saturn ring plane crossing - Aug. 10.

3 4



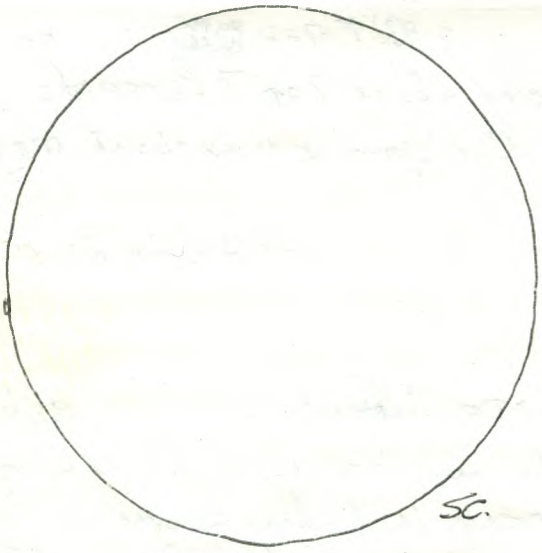
SC

2g
7s
RSN27 Aug. 7
18:45-18:50UT



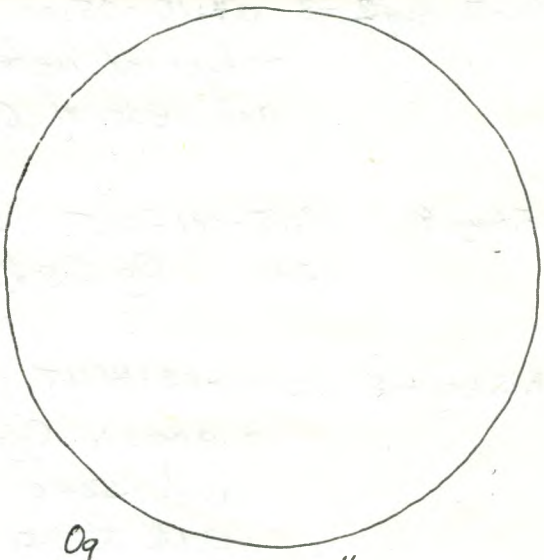
SC

Og Aug. 8
OS
RSNO 19:48-19:52UT

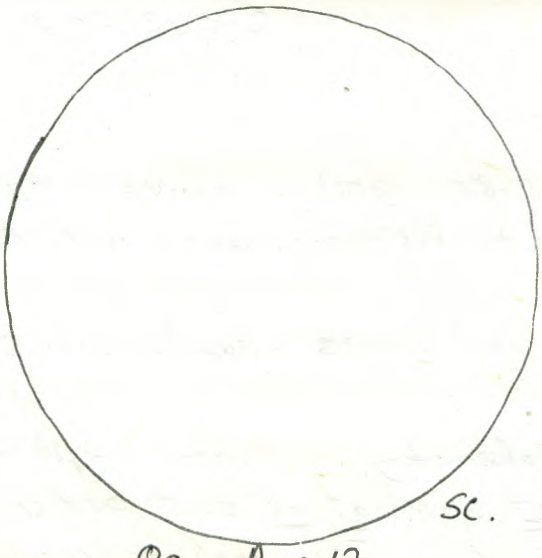


SC.

Og Aug. 10, 1995
OS
RSNO 18:15-18:20UT



Og
OS
RSNO Aug. 11.
19:12-19:15.



SC.

Og Aug. 12
OS
RSNO 18:20-18:25 UT.

1995

M. Aug. 7 18:45-18:50UT SS C-8, 32, 28, 20, 15.5
sun 2g 7s RSN27

M.-T. Aug. 7-8 02:30-3:10 UT y gml ne
- looking for Perseids - saw a few meteors - mainly sporadics.
Later inside while looking through north window, I saw a very bright "point meteor" - about mag -4 to -5 in Ursa Minor - about 3 degrees N. of Kochab. It lasted about 15 seconds.

point meteor

Tu. Aug. 8 19:48-19:52 UT SS C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

T.-W. Aug. 8-9 02:30-03:15 UT y gml. ne
- looked for Perseids - saw several meteors. c. Peter and Jonathon
- also showed them Jupiter, Alcor and Mizar, lunar craters.

W.-Th. Aug. 9-10 02:45-03:30 UT y gml ne
- observed meteors with Peter, Janice, Jonathon, Denise
- saw several including 2 or more Perseids.

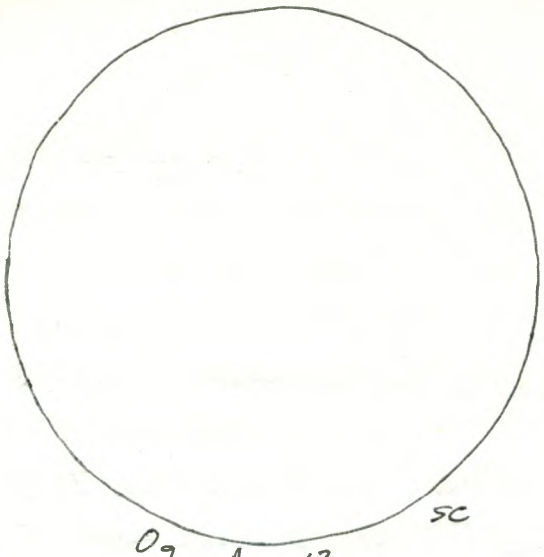
Th. Aug. 10 18:15-18:20UT SS C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

Aug. 10-11 2:45-3:30 UT. observed four Perseids

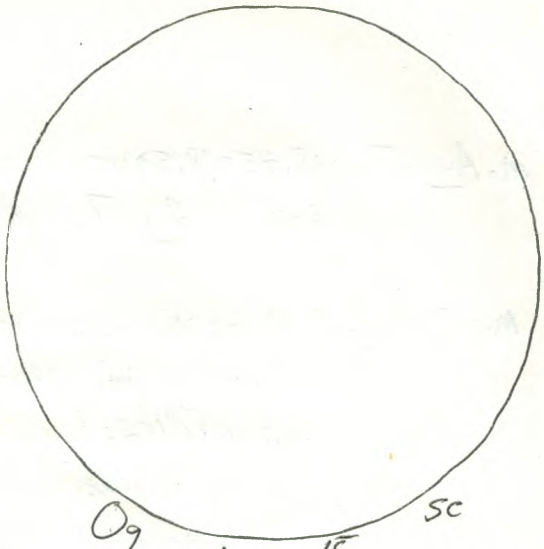
F. Aug. 11 19:12-19:15 UT SS C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

Sa. Aug. 12 18:20-18:25UT SS C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

Sa-Su. Aug. 12-13 02:55-04:35 y fml ne.
- observed Perseids from chaise-lounge with Denise, her friend Phyllis, husband Kevin, and Christina for awhile; saw about 10 or 12 Perseids including one about mag. -2 in Ursa Minor and also two that were only about a

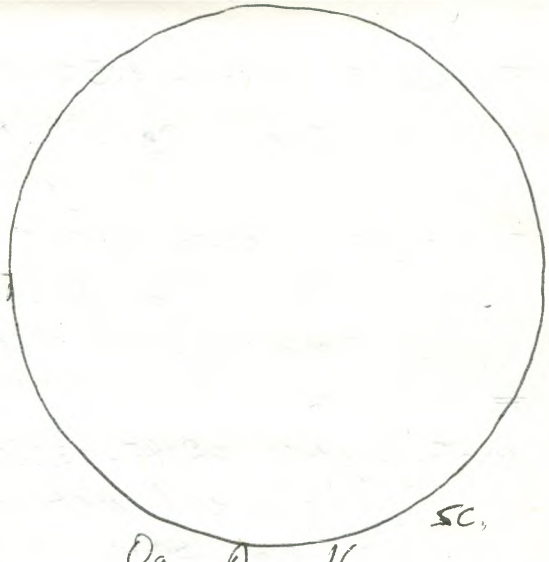


Og Aug. 13
Os
RSNO 17:48-17:50UT



Og Aug. 15
Os
RSNO 18:05-18:10UT

Comet Hale-Bopp:
discovered in late July 1995 by Alan Hale of Las Cruces, NM, and Tom Bopp of Phoenix, AZ, the latter of whom did not own a telescope and was observing with a group of 5 amateurs including Jim Stevens who owned the telescope. Both Hale and Bopp observed the comet in the same field as M70 in Saggitarius.
At 7AU away it was the most distant comet ever discovered by amateurs.



Og Aug. 16
Os
RSNO 17:35-17:40UT

1995

second or two apart in time; only the brightest could be seen because the moon was just past Full - seemed to be a fairly good year, but the moonlight was the major problem.

Su. Aug. 13. 17:48-17:50 UT SS C-8, 32, 28, 20, 15.5
Sun Og Os RSNO

Tu. Aug. 15 18:05-18:10 UT SS C-8, 32, 28, 20, 15.5.
Sun Og Os RSNO

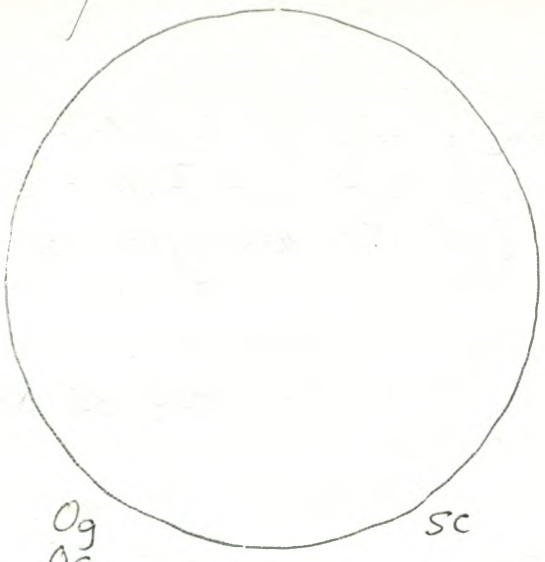
T.-W. Aug 15-16 02:00-03:50 UT OO S-9(?)T 8-9 some cloud C-14, 32; 20x100b.
C-14: M57, Jupiter and 3 moons - one in transit or near end of transit; area of Comet Hale-Bopp, but not sure of seeing it, M8
20x100b: - Jupiter, M28, M22, Uranus, Neptune, M75, M69, area of Comet Hale-Bopp, but was not sure of seeing it because of its faintness. It was about 1° N. of M69, at about R.A.: $18^h 28^m.8$ Dec.: -31°22° (See U378)

W. Aug. 16 17:35-17:40 UT SS C-8, 32, 28, 20, 15.5
Sun Og Os RSNO

40
12
19,

W.-Th. Aug. 16-17 01:50-03:40 UT OO S-9 T8-9 some cloud later 20x100b; C-14, 32,
20x100b: M8, M20, M21, Jupiter, Uranus, Neptune, M75, M69, area of Comet Hale-Bopp, but not sure of seeing it because of its faintness, NGC 6811 9 OC in Cyg, at mag. 7.3 (U84); NGC 6520 small OC in Sgr mag. 8.1, (U339)
C-14: M57, Jupiter and III Tr. E. noticed with 12mm ocular at 326x 1 min later than predicted in the O.H. at 01:12 UT - bands on Jupiter fairly clear; searched NW of M69 for Comet Hale-Bopp but not sure of seeing it, though I must have been close to the field.

1



Og
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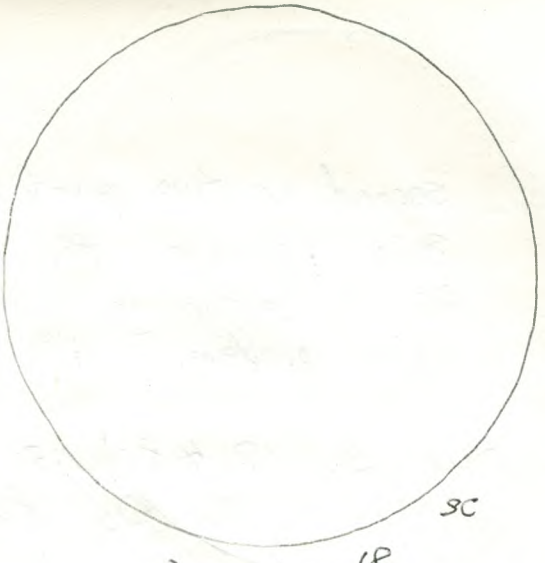
RSNO

Aug. 17
17:50-17:55 UT



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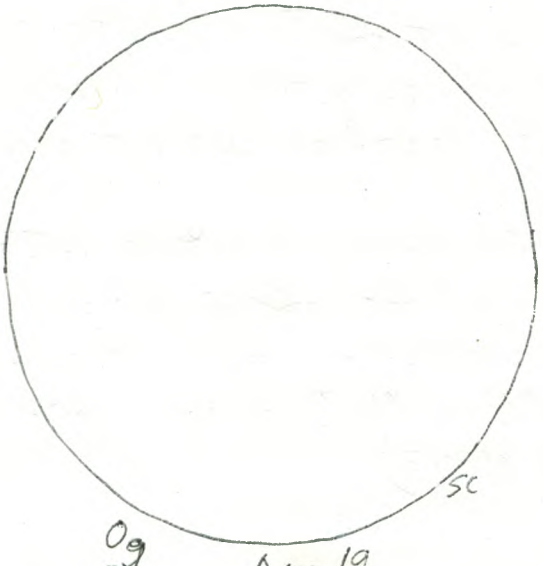
Aug. 18
20:40-20:45 UT



Og
Os
RSNO

Aug. 19
20:15-20:20 UT

1995

Th. Aug. 17 17:50-17:55UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSNO

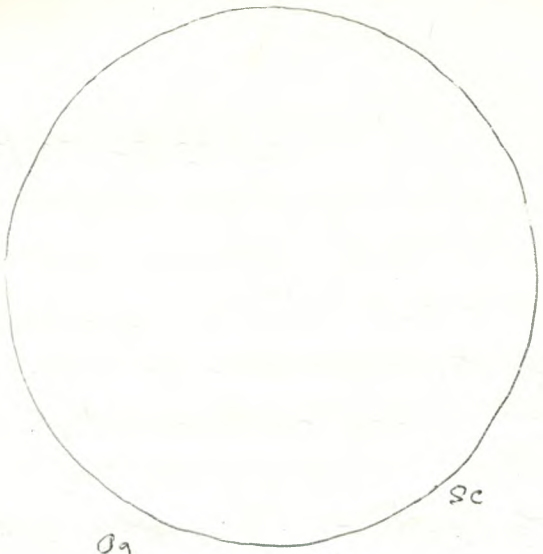
Th.-F. Aug 17-18 01:30-04:20 00 S-8(?) T 7-8 scattered cloud 20x100b
Uranus, Neptune, M22, M28, M11 and R Scuti - apparently back up to "normal" brightness, area of Comet Hale-Bopp but no hope of seeing it because of its faintness and the haze and cloud in the area,
5 NGC objects NGC 281 EN in Cas, NGC 457 OC in Cass, NGC 663 OC in Cas, NGC 6888 SNR? in Cyg, NGC 6939 OC in Cep

F. Aug. 18 20:40-20:45 UT SS. C-8, 32, 28, 20, 15.5.
sun Og Os RSNO

F.-S. Aug. 18-19 01:45-04:30UT 00 S-8-9 T 9.5! 20x100b; C-14, 40
20x100b: M28, M22, M16, M17, M18, M23, M24, M25, M8, M20, M21, Uranus, Neptune, Jupiter, area of Comet Hale-Bopp, but not sure of seeing it; Double Cluster in Per, M31, M32, M33, M110
C-14: Jupiter, NGC 6960 - Veil Nebula and NGC 6992 and 6995 - eastern part of Veil Nebula, NGC 7027 PN in Cyg, NGC 6445 PN in Sgr and nearby NGC 6440 a GC (See U339), NGC 6939 OC in Cep and nearby NGC 6946, a very large face-on Spiral Galaxy near η Cep (See U32), NGC 6624 GC in Sgr, NGC 869/884 - the Double Cluster in Perseus.

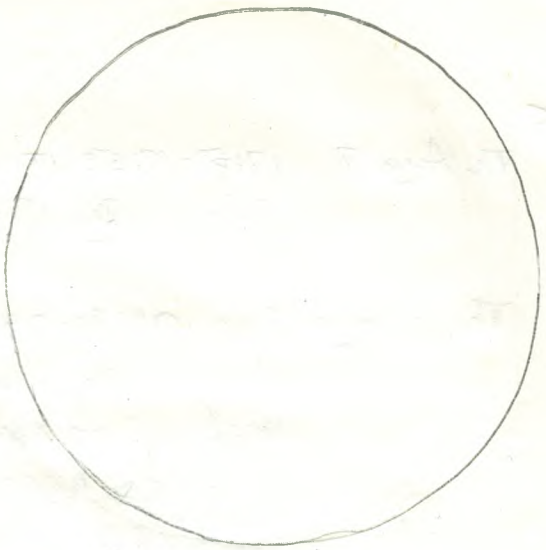
Sa. Aug. 19 20:15-20:20UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSN O

Sa.-Su. Aug. 19-20 01:45-04:15 UT 00 S-8?9 T-8-9 severe dewing 20x100b; C-14, 40
20x100b: Jupiter, Uranus, Neptune, M22, M28, M75, M23 M24, M25, M16, M17, M18, M8, M20, M21, M31, M32,



Og
Os
RSNO

Aug. 20
19:20-19:25 UT



Og
Os
RSNO

Aug 21
17:30-17:34 UT

1995

M110, Saturn, area of Comet Hale-Bopp in Sgr, but not sure of seeing it, NGC 40 in Cep

C-14: Jupiter, M57, area of or near Comet Hale-Bopp but not sure of seeing it - saw a faint "somewhat nebulous" area, but not sure it was the comet. - very severe dewing; some clouds during the session

Sa. Aug. 20, 19:20-19:25 UT SS C-8,32,28,20,15.5.
scan Og Os RSNO

Su-M. Aug. 20-21 02:25-03:30 UT y S-7-8(?) T8 some haze, & cloud 9x63b
M22, M8, M11 and R Scuti, M31, Double Cluster, Saturn, Col399

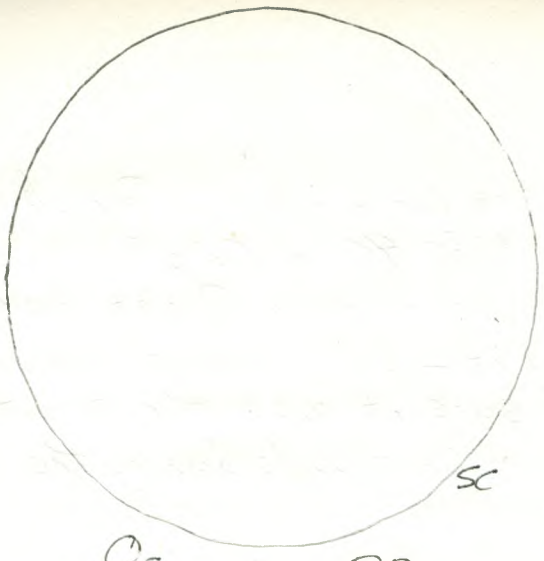
M Aug 21 17:20-19:37 UT SS C-8,32,28,20,15.5
scan Og Os RSNO

M-T. Aug. 21-22 01:40-05:45 UT OO S-8? T9 but clouds moved in 20x100b; C-14,40

20x100b: Jupiter, M28, M22, Uranus, Neptune, M16, M17, M18, M24, M25, M23, M75, M69, area of Comet Hale-Bopp near γ Sgr, but not sure of seeing it because of its faintness

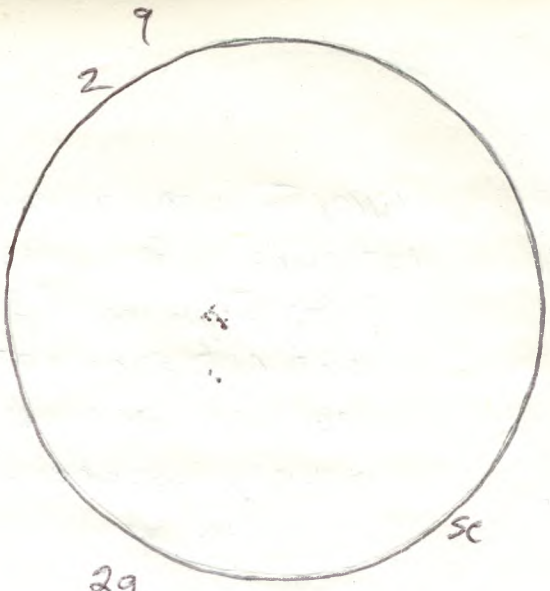
C-14: M57, NGC6369 not far from θ Oph (U338) (It is a planetary nebula - fairly faint ~~and a fairly small reasonable~~ size), also NGC 6401 - a GC just E of 6369, NGC6355 - GC also near θ Oph; area of Comet Hale-Bopp, but not sure of seeing it though one or several faint objects were seen; NGC 6781 PN in Aquila - faint but fairly large in the telescope - found by star-hopping from μ Aql on U207 to the planetary (See U206); looked for NGC7635 - the Bubble Nebula in Cas near M52, but not sure of seeing it; M52.

6781



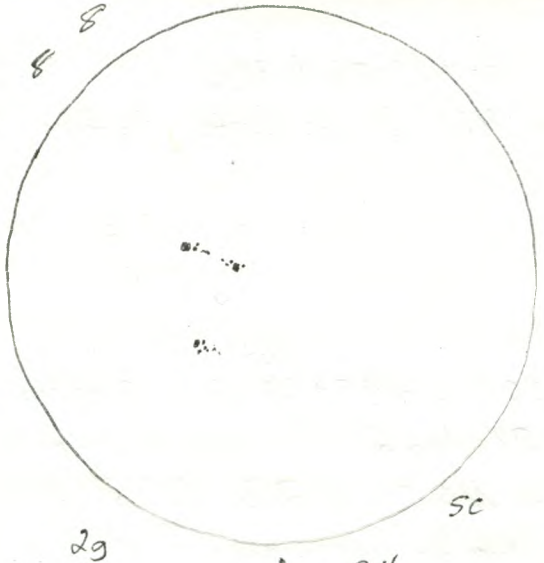
Cg
O5
RSNO

Aug. 22
2T.24 - 21:28UT



2g
11s
RSN31

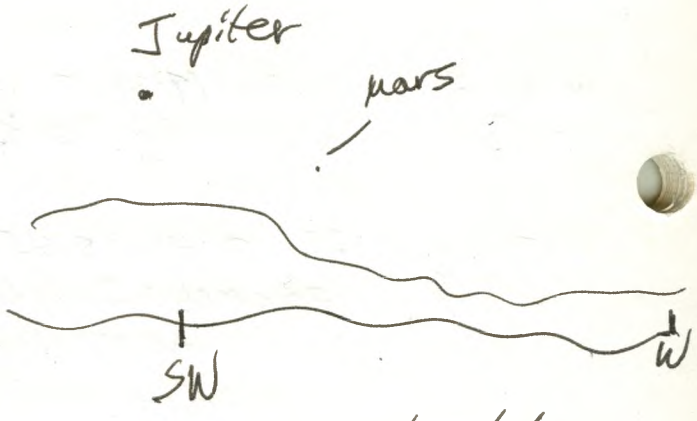
Aug23
21:55 - 22:00UT



2g
16s
RSN36

Aug.24
18:45 - 18:50UT

Error: See 8 pages forward



Silver Lake

S.M. Oct-29-30

22:30 - 22:45UT

1995

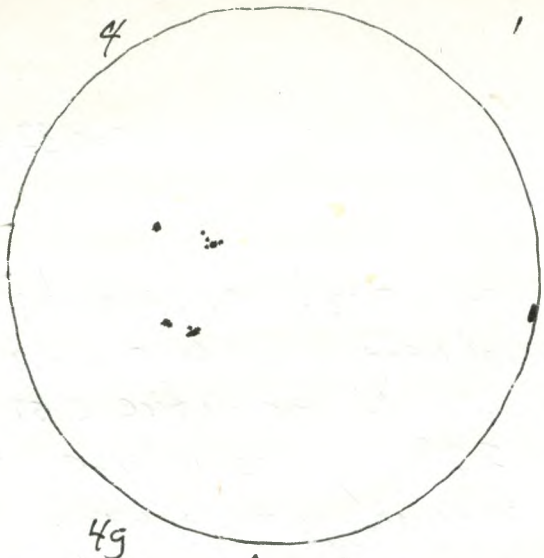
Tu. Aug. 22 21:24-21:28UT SS C-8, 32, 28, 20, 15.5.
Sun 0g 0s RSNO

Tu-W. Aug 22-23 01:30-07:15UT 00 S-8-9 T9½! ne; 20x100b; C-14, 40
ne: constellations; several meteors, at least one a Perseid
Aurora Aurora - strong glow in N. for entire session
an arc up about 20° - quite intense at times -
brightest Aurora seen in quite a while
20x100b: area of Hale-Bopp, but not sure of
seeing it, M28, M22, M16, M17, M11 and R Sca,
M23, M24, M25, M75, M69, M18, M31, M32, M110,
Comet d'Arrest Comet d'Arrest - faint and diffuse, in Cetus
(used Map in Astronomy and coordinates from Skyline);
asteroid Iris asteroid Iris - near Pleiades.
C-14: area of Comet Hale-Bopp, but not sure of seeing
it, NGC 7129 - RN in Cep (star hopped from ζ Cep)
NGC 7635 EN in Cas - the Bubble Nebula - faint
nebulosity near bright star; NGC 185 and 147
two galaxies N of M31 in Cas (U60)
NGC 936 - bright galaxy in Cet with
"neat star pattern" just N. of it; NGC 1023
(U62 and 93) - galaxy in Per; NGC 1491 EN in
1491 Per (U39) - almost square in shape - interesting! -
near the star λ Per; Saturn with
the thin ring quite easily seen at 98X

W. Aug. 23 21:55-22:00 UT SS C-8, 32, 28, 20, 15.5
Sun 2g 11s RSN31

W.-Th. Aug 23-24 00:45-00:55UT 00 twl C-14, 19
Jupiter - shown to Lorne and Sara Hale and Gabriel,
a friend of theirs. The sky clouded over and it
became windy and I had to quit observing.
Aurora - some evidence of Aurora

Th. Aug. 24 18:45-18:50UT SS C-8, 32, 28, 20, 15.5.
Sun 2g 16s RSN36



49
11 5
RSN51

Aug. 25
19:55–20:00UT

Note: The extremely bright flash I saw in the west at about 4:40UT was not ~~seen~~ directly since I was looking SE, and was low in the lawn chaise. Howard Fowler phoned me the next morning about 11:00 am. to report hearing about a fireball going N. to S. and possibly meteorite(s) falling in Lake Ontario. There was also a report of property damage if caused in Windsor; that report was later confirmed as false.

1995

Th.-F. Aug. 24-25 03:18-04:48 UT y S-8 T9-9½! a few clouds ne

- From lawn chaise I observed constellations and meteors under very good skies. At least one meteor was a Perseid. A bright auroral arc was in the N. It appeared more like a very intense spot due N. at times. It seemed to have lasted all night since it was still there when I checked toward morning from indoors. It was the third consecutive night in which some aurora was seen. I noticed an extremely bright flash in the western sky before the end of the session.

Aurora

F. Aug. 25 19:55-20:00 UT SS C-8, 32, 28, 20, 15.5

Sun 4g 11s RSN51

F.-S. Aug. 25-26 01:30-04:30 UT 00 S-8(?) T9-9.5 until clouds came 20x100b; C-14

20x100b: M25, M24, M23, M8, M22, Neptune, M75, M16, M17, M18, Jupiter, area of Comet Hale-Bopp, but not sure of seeing it - (may have seen it)

C-14: Jupiter and 4 moons

spent most of time photographing Milky Way areas and other areas using Fujichrome Sensia 400 film and fairly new Kodak Ektachrome P1600 film.

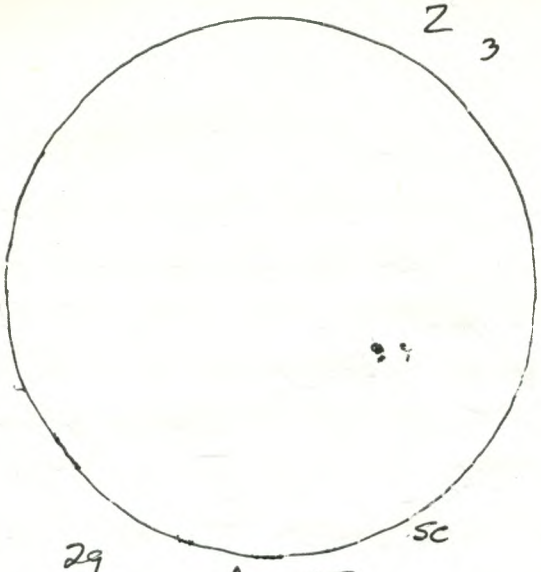
Clouds moved in during latter half of the session

Su.-M. Aug. 27-28 01:30-05:30 UT 00 S-8(?) T9.5! 20x100b; C-14, 40

20x100b: M23, M24, M25, M16, M17, M18, M8, M20, M21, M22, Uranus, Neptune, M75, area of Comet Hale-Bopp, but not sure of seeing it; Helix Nebula, M2, Barnard's Star, T Cor Bor.

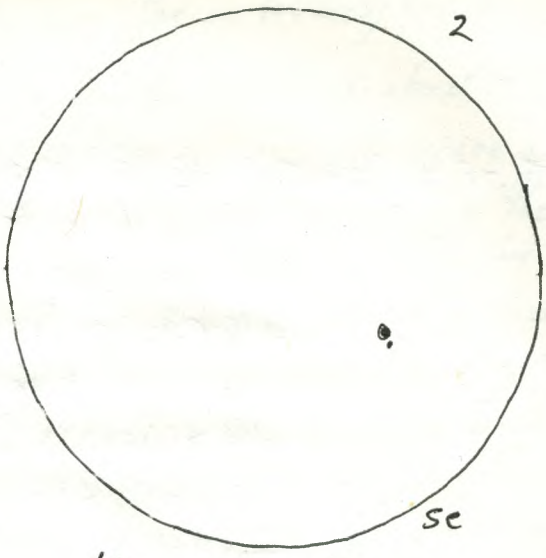
C-14: M13, NGC6207 nearby, Jupiter and 4 moons, area of Comet Hale-Bopp - saw a hazy area but was not quite sure it was the comet - it may have been.

- photographed various sky areas - piggyback using 200mm lens and Ektachrome P1600 film.



2g
5S
RSN25

Aug. 28
18:15 UT



Lg
2S
RSN12

Aug. 29
20:15 UT

1995

M. Aug. 28 18:15 UT ss C-8, 32
sun 2g 5s RSN25

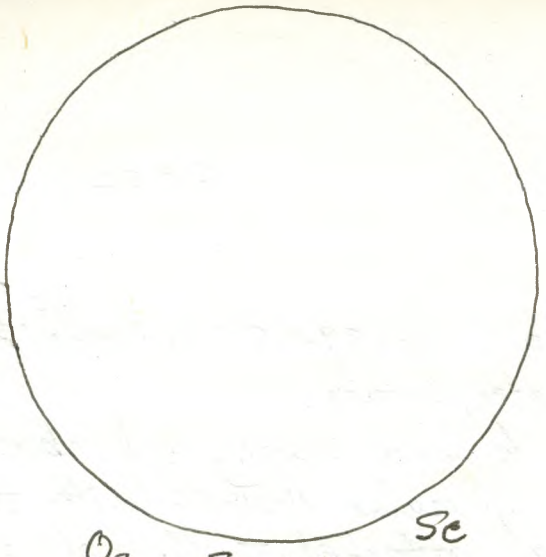
M.-T. Aug. 28-29 01:20-05:30 UT 00 S-8 T9-9.5 C-14, Viewers Binocular; 20x100
C-14: M13, M27, M57, Jupiter, Saturn.
Since Dr. Roy Bishop and Gertrude were visiting and observing with us, Roy used his Zeiss binocular viewers with two eyepices that were identical attached to the C-14 and to his 4" refractor. It gave excellent views!
20x100b: M22, Uranus, Neptune, Barnard's Star, M16, M25, M24, R Cor Bor, T Cor Bor, M2, M31, M32, M33, M110, Helix Nebula, NGC7789
Dr. Roy Bishop's 4" refractor: γ Arietis, σ Her (split!), Helix Nebula, Double Cluster, Jupiter, Saturn
Excellent binocular views! Earlier in the day Dr. Bishop had used the refractor near the shore to look at the island and a bird near the little island - with amazing clarity!

T. Aug. 29 20:15 UT C-8, 32
sun 1g 2s RSN12

T.-W. Aug. 29-30 23:00 UT y before sunset ne
- observed crescent moon naked-eye with sun up 47 minutes before sunset with moon only 3 days 18h 29m since New Moon was last Sat. Aug. 26 at 04h 31m (Moon 3.770 days old)

01:30-06:30 UT 00 S-8-9T 9.5! 20x100b; C-14
20x100b: M22, Uranus, Neptune, M75, M20, M8, M21, M23, M24, M25, M17, M8, M16, M11 and R Scuti, R Cor Bor T Cor Bor, Barnard's Star, NGC247 - faint - near β Cet, NGC253, NGC288, Comet d'Arrest near ZZ Cet Sculptoris (on U306), Jupiter, M36, 37, 38 when Auriga rose
C-14: Jupiter
- photographed various areas in the summer

Comet



Og
Os
RSNO

Sept. 11
20:30-20:35UT

1995.

Milky Way and elsewhere using Kodak Ektachrome P1600 filon - first focus - using the Giant Easy Guider with the lens forward.
- an exceptionally good night for observing and photographing.

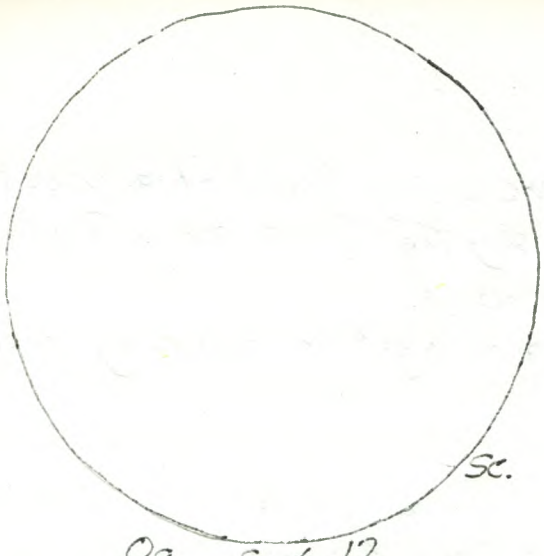
Sa.-Su. Sept. 2-3 01:30 - 02:30 UT y some cloud, fgml 9x63b
M31, μ Cep, area of North America Nebula, area of Polaris.

M.-T. Sept. 4-5 01:55 - 02:15 UT y and t gml. ne C-8, 32, 15.5
ne: iny - observed Constellations
C-8: Jupiter - just as it went behind trees in SW; Saturn with "thin" rings and Titan; Alcor and Mizar

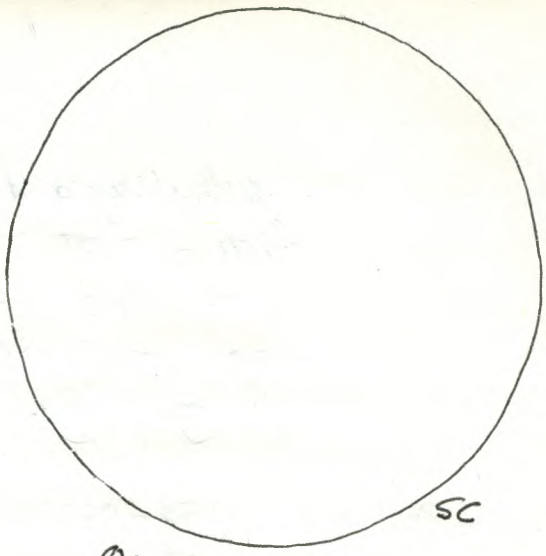
Sa.-Su. Sept. 9-10 23:00-23:10 UT dock at sh twl ne
- observed Harvest Moon rising above trees in E. It rose about 7 min. after sunset
00:30 - 01:30 UT t fml C-8, 19, 12, 7.4, 13
Jupiter and 4 moons, Mizar and Alcor.

Su.-M. Sept. 10-11 01:30-02:30 UT y fml 9x63b
- After watching near-Full Moon rise over trees across lake at about an hour and a half before, I observed using binoculars in clear moonlit skies. - observed M13, M22, Mizar and Alcor, IC 4665 and area of Barnard's Star.

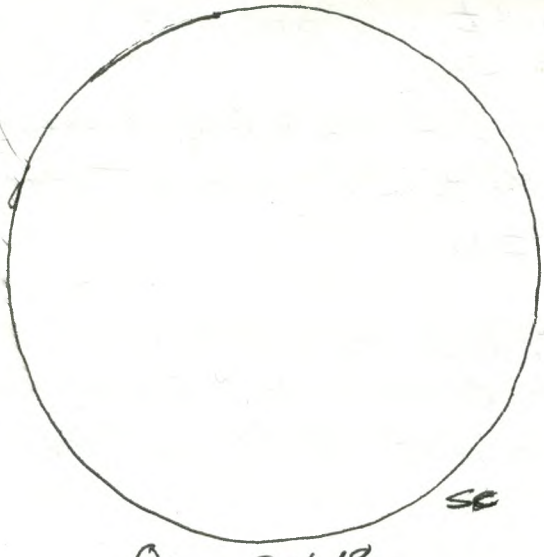
M. Sept. 11. 20:30 - 20:35 UT 55 C-8, 32, 28, 20, 15.5
sun 0y 0s RSN 0
- first observation with new Thousand Oaks full-aperture 8" C-8 Type 2 solar filter.



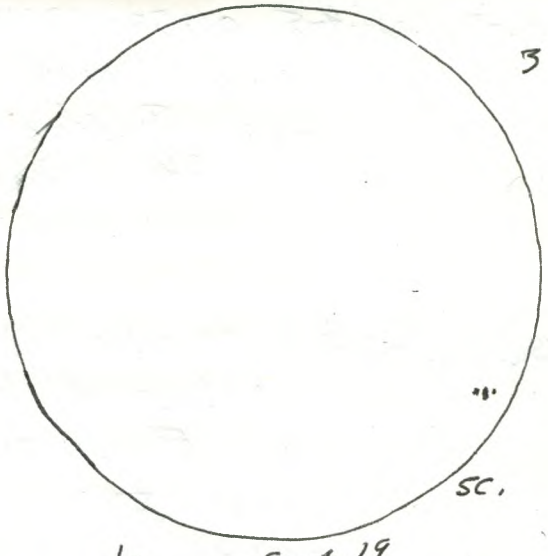
Og Sept. 12
Os 20:30-20:35 UT
RSNO



Og Sept. 15
Os 19:45-19:50
RSNO



Og Sept. 18.
Os 20:10-20:15 UT
RSNO



lg Sept. 19
3s
RSN13

1995

Tu. Sept. 12 20:30-20:35 UT SS C-8, 32, 28, 20, 15.5
Sun Og Os RSNO

F. Sept. 15 19:45-19:50 UT C-8, 32, 28, 20, 15.5
Sun Og Os RSNO

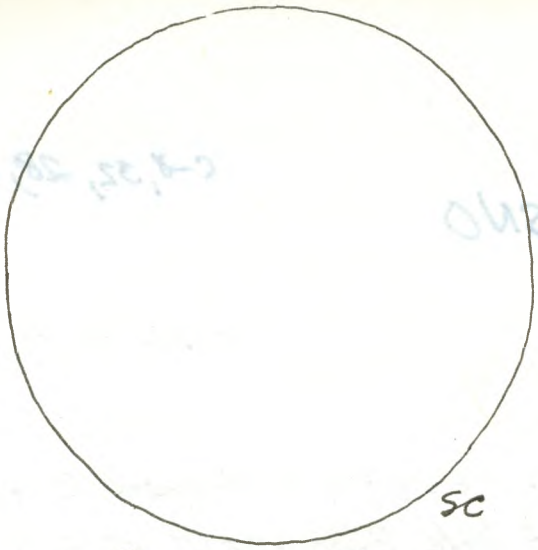
F.-S. Sept 15-16 00:50-03:00 UT 00 S8(?)T 9-7 deteriorated C-14, 40; 20x100b
C-14: area of Comet Hale Bopp, near γ Sgr but not sure of seeing it, though it was likely in the field, being quite close to δ Sgr; in fact just W of that star and closer to it than NGC 6624 which was in the field though SE of the star; M57, M13.
20x100b: M22, M28, M16, M17, M18, M24, M23, M25, M21, M20, M11 and R Scuti, Uranus, Neptune, M31, M32, M33, M110,
Nova Cas the recently discovered nova in Cas at R.A.: 1h 5m.1, Dec.: +54°2' - at about mag. 8. - easily seen (See U36) - about 1° from μ Cas and 4° from ξ Cas.

M. Sept. 18 20:10-20:15 UT SS C-8, 32, 28, 20, 15.5
Sun Og Os RSNO

M-T. Sept. 18-19 03:00-03:45 UT y S-8(?)T 9-9.5 20x100b
M11 and R Scuti, Barnard's Star, M13, I.C. 4665,
Nova Cas M81, M82, area of SS Cyg, Nova Cas, Double Cluster, M45, NGC 253 - g. in Sculptor.

Tu. Sept. 19 19:40-19:45 UT SS C-8, 32, 28, 20, 15.5
Sun Ig 3s RSN13

Th.-F. Sept. 21-22 02:15-03:00 UT y S-8(?)T 8.5-9 9x63b
M11 and R Scuti, M2, M13, Double Cluster in Perseus
ne: noted Algol near minimum



Og Sept. 28
Os 20:48-20:50 UT
RSNO

Og Sept. 29
Os 20:15-20:17 UT
RSNO

1995

F.-S. Sept. 22-23 03:20-05:30UT y S-8.5 T9-9.5 20x100b

NGC 752 - OC near β Tri and "Golf Club" or "Hockey Stick" configuration near it, M2, R Ceti, M77, M74, Mira - near minimum at about mag. 9.0, NGC 153 and NGC 288 South of β Cet, Pleiades, M36, M37, M38. North America Nebula - outstanding in very transparent skies and near the zenith. - area of California Nebula - with the difficult nebula very faintly seen, β Cap and other stars near it (See article on Double Stars in Cap. - S. & T. Oct. 1995, p. 68-70).

Sa.-Su. Sept. 23-24 01:00-04:40UT 00 S-9T9 until fog became problem 20x100b; C-14, 13

20x100b: M2, M16, M17, M18, M24, M23, M28, M25, M22, M8, M21, area of Comet Hale-Bopp near γ Sgr but not sure of seeing it since it was at about Mag. 10., M31, M32, M33, M110, NGC 752 near β Tri and nearby "Golf Club" configuration of stars, IC 4665, Barnard's Star, M12, M11 and R Scuti, Neptune, Mira - still very faint at mag. about 9.0, M74.

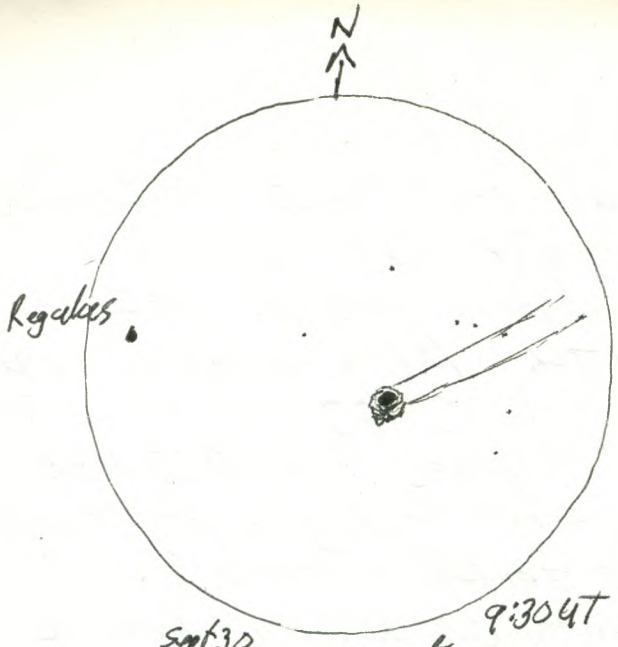
C-14: Saturn and at least 2 of the satellites including Titan and a thin ring system; NGC 7331 in Pegasus, but when I tried to locate Stephan's Quintet, dewing was a problem. Fog and dewing were problems.

Th. Sept. 28 20:45-20:50UT t C-8, 32, 28, 20, 15.5

Sun Og Os RSNO

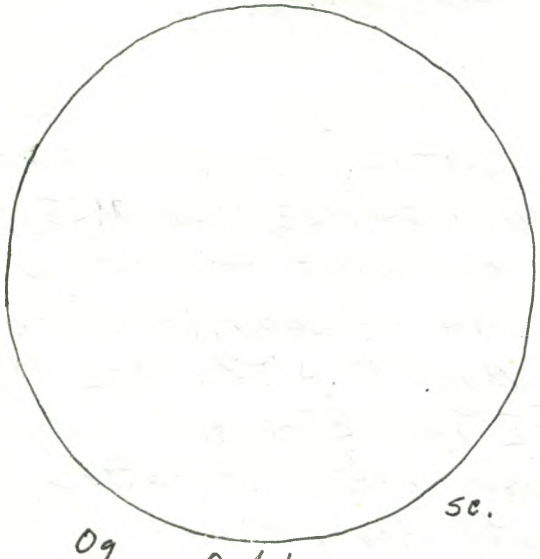
F. Sept. 29 20:15-20:17 UT ss C-8, 32, 28, 20, 15.5

Sun Og Os RSNO

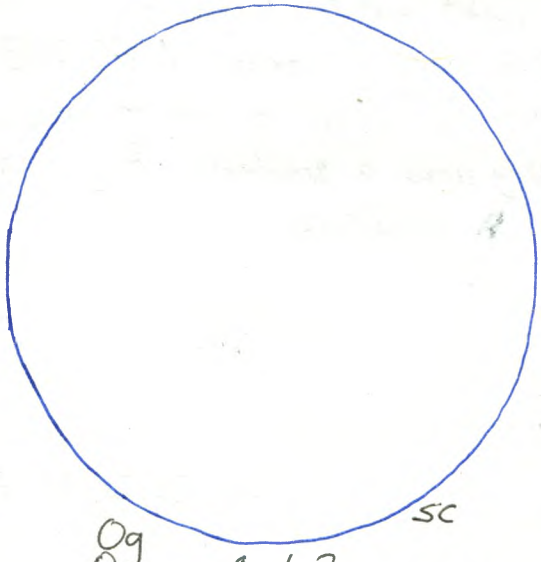


New Comet discovery

I heard about on Skyline on Sept. 22 was credited to 3 Japanese amateurs. It was suggested that it might be the same as Comet ~~Ezito~~ de Vico (?), last seen in 1846. The Skyline announcement on September 29 called the comet Comet ~~Ezito~~ de Vico. On talking to David Levy on Oct. 1, I found out that it is called Comet de Vico, and it was not seen on its last close approach to the inner solar system It has a period of about 75 years - some what similar to Halley's Comet.



OG
OS
RSNO
Oct. 1
18:55-19:00UT



OG
OS
RSNO
Oct. 2
20:50-20:55UT

1995 F.-S. Sept. 29-30 06:45-06:50 UT S-8?T9.5 ne

Fall and Winter Constellations

09:30-10:00 UT twl 20x100b

About 5 minutes after the beginning of morning twilight and the bright zodiacal Light in the E. I saw the newly discovered comet Comet Ezikd(?) originally discovered in 1846 - about mag. 5 but not seen ne probably because of twilight and zodiacal Light - with tail about 1°-1½° in length - appearing very bright with coma - like a very bright globular cluster - looked for Comet Bradfield but did not see it - near δ Leonis - also M41, M42, M43, area of R Leonis.

Comet ← deVico

(05:00-05:45 E.DT)

Sa-Su. Sept. 30-Oct. 1 m 09:00-09:45 UT y S-?T8.5-9; twl 20x100b

Before twilight I observed two comets:

(1) Comet ~~Ezika~~ de Vico which was very bright at about R.A 10h 7m Dec. +12°.5 and mag. 5 - about ½ a degree from Regulus. The tail was less evident than yesterday - about ½° in length and pointing directly away from the Sun. The coma seemed to be visible. (U189)

(2) Comet Bradfield, fuzzy, with no evidence of a tail - at R.A 11h 11m Dec. +21°.7 - just a little more than 1° from δ Leonis (U146) - about mag. 8.

also M42, M43, M41, area of R Leonis

Zodical Light was very bright and high in the E.

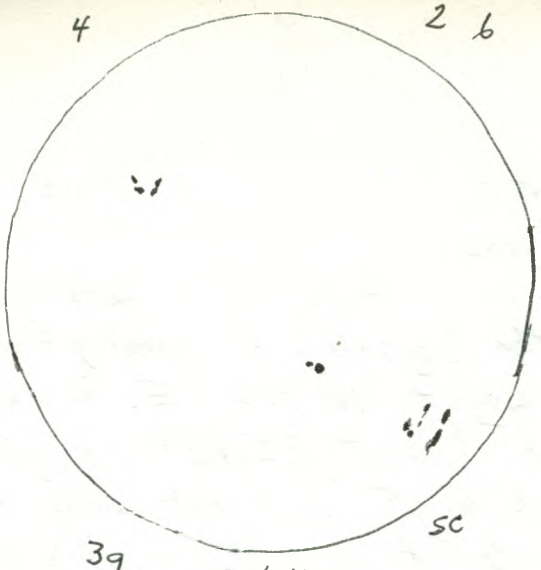
2 comets - deVico Bradfield

Su. Oct. 1 18:55-19:00 UT SS C-8,32,28,20,15.5

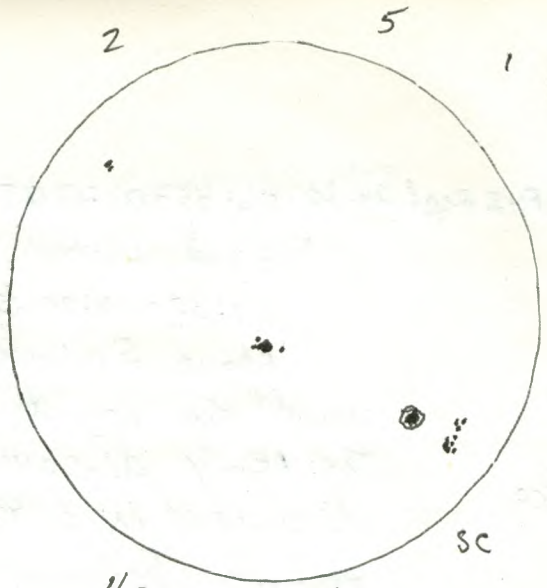
Sun Og Os RSNO

M. Oct. 2 20:50-20:55 UT nd C-8,32,28,20,15.5

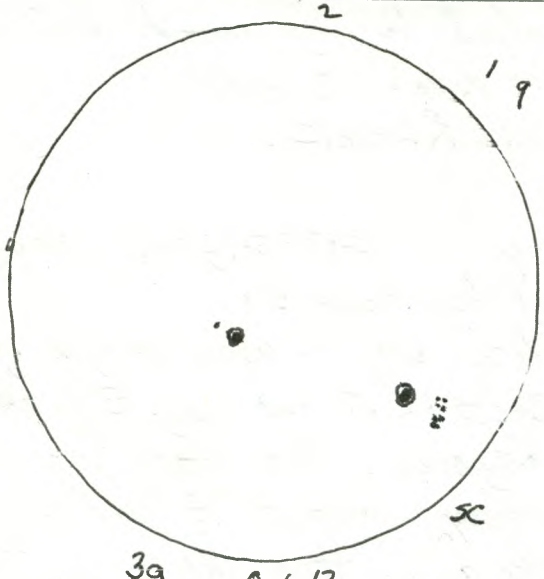
Sun Og Os RSNO



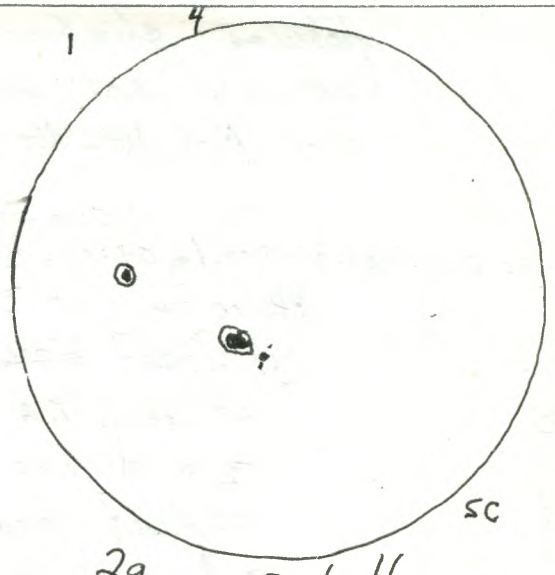
3g
12s
RSN42
Oct. 11
20:25-20:30UT



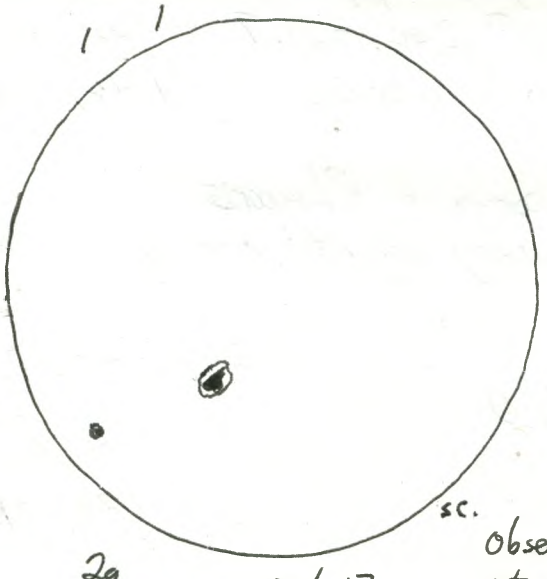
4g
15s
RSN55
Oct. 12
21:00-21:05UT



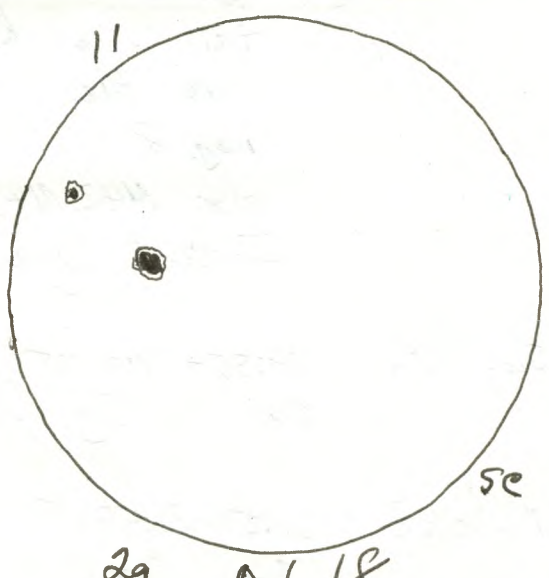
3g
12s
RSN42
Oct. 13
20:00-20:05UT



2g
5s
RSN25
Oct. 16
20:15-20:20UT



2g
2s
RSN22
Oct. 17
20:55-21:00UT
Observation at t.



2g
2s
RSN22
Oct. 18
20:00-20:05UT

1995

W. Oct. 11 20:25-20:30 UT ss C-8, 32, 28.
sun 3g 12s RSN42

Th. Oct. 12 21:00 - 21:05 UT ss. C-8, 32, 28, 20, 15.5
sun 4g 15s RSN55

F. Oct. 13 20:00-20:05 UT ss C-8, 32, 28, 20, 15.5
sun 3g 12s RSN42

Mon Oct. ~~16~~ 20:15-20:20 UT ss C-8, 32, 28, 20, 15.5
sun 2g 5s RSN25

Tu. Oct. 17 ~~20~~:55-21:00 UT t C-8, 32, 28, 20, 15.5
sun 2g 2s RSN22

W. Oct. 18 20:00 - 20:05 UT ss C-8, 32, 28, 20, 15.5
sun 2g 2s RSN22

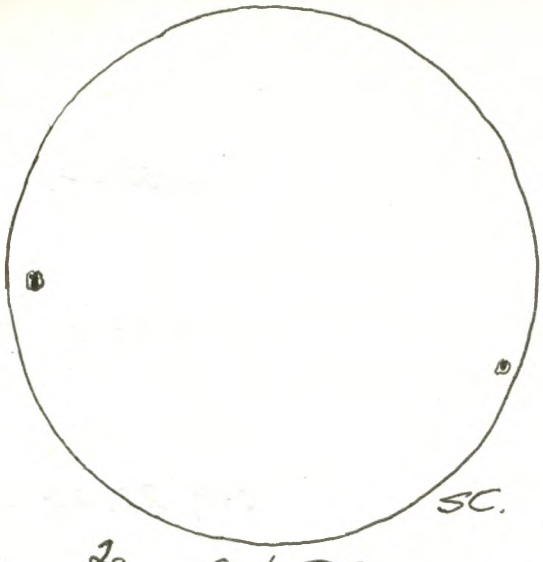
W.-Th. Oct. 18-19 01:20-04:10 UT periodically y and nd ne
- a good Aurora display seen periodically and amid some clouds for part of the display. There was a bright glow from NW to NE up about 40° or more and some patches were seen and ~~son~~ vertical bands were occasionally seen. There was not much colour in this display — mainly white.

Aurora

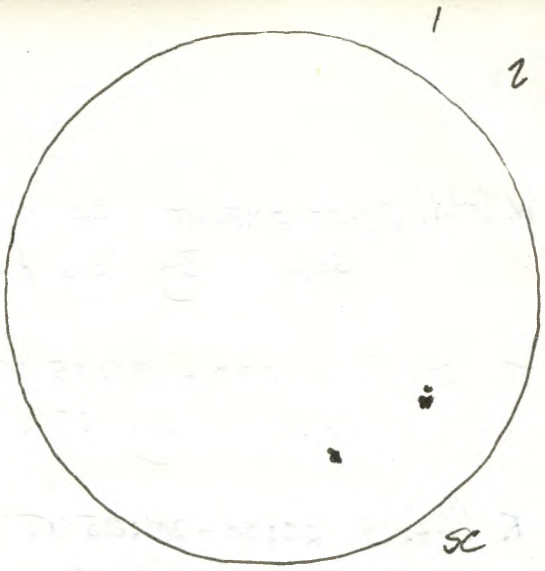
F. Oct. 20 20:35-20:40 UT ss C-8, 32, 28, 20, 15.5
sun 2g 2s RSN22

M. Oct. 23 20:~~20~~-20:25 UT ss C-8, 32, 28, 20, 15.5
sun 2g 3s RSN23

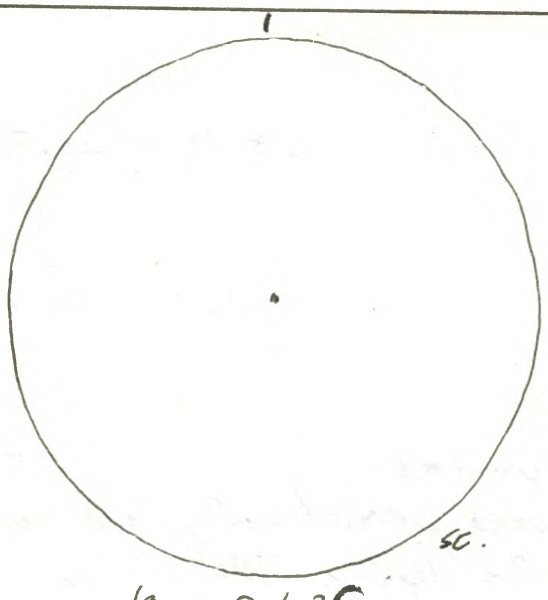
M.-T. Oct. 23-24 23:40-23:50 UT y + dock twl 9x63b
looked briefly for Comet Schwassman - Wachman 3 low in SW, but was not sure of seeing it.
- also M22, M8, M13



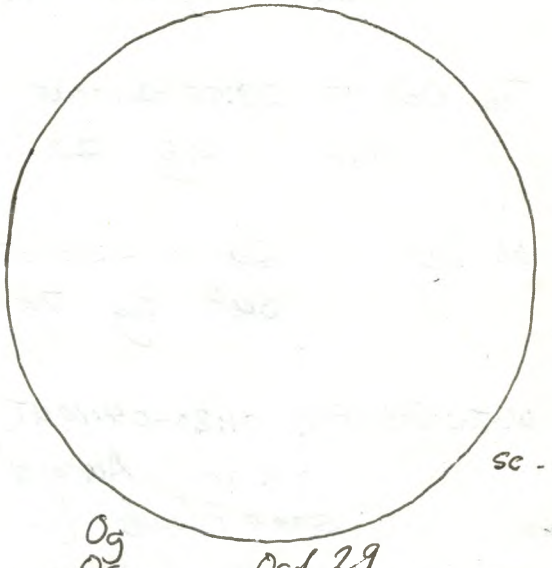
2g
2s
RSN22
Oct. 20
20:35–20:40UT



2g
3s
RSN23
Oct. 23
20:20-20:25UT

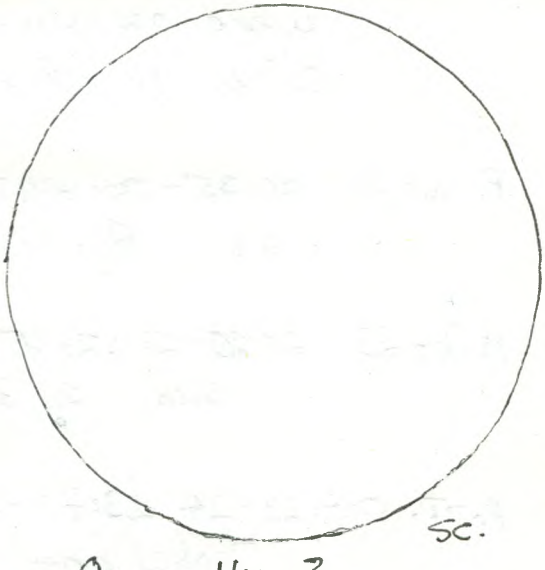


1g
1s
RSN11
Oct. 26
20:20-20:25UT



0g
0s
RSN0
Oct. 29
19:45-19:50UT

S.M. Oct 29-30
22:30-22:45 UT.



0g
0s
RSN0
Nov. 3
20:35-20:40UT

1995

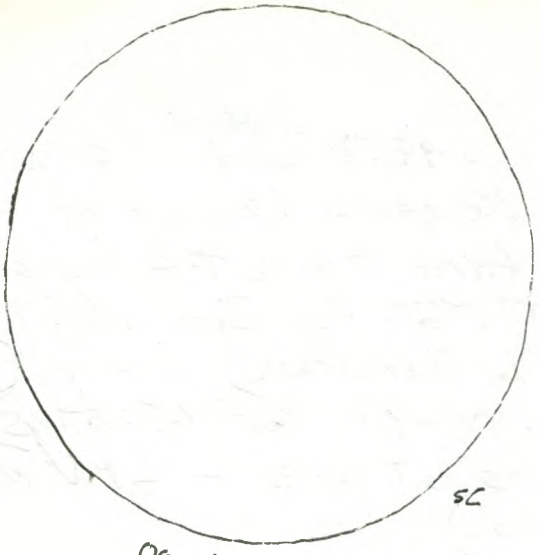
T.-W. Oct. 24-25 23:30-20:15 UT y S-9(?)T8 scattered cloud 20x100b
- 51 Peg - star recently in the news because of discovery of "planet" orbitting it in a 4.2 day period.
51 Peg area area near 51 Peg (U168) 60 Peg (Irr. mag. 7.4-8), HR Peg and IM Peg (not in Burnham), AF Peg (a semi-reg. variable, mag. 8.8-9.8 per 65 days), area of SX Peg (which was not seen - LPV mag. 9.0 - 14..., 307 day period.)

TH. Oct 26 20:20-20:25 UT ss C-8, 32, 28, 20, 15.5
sun 6g 1s RSN11

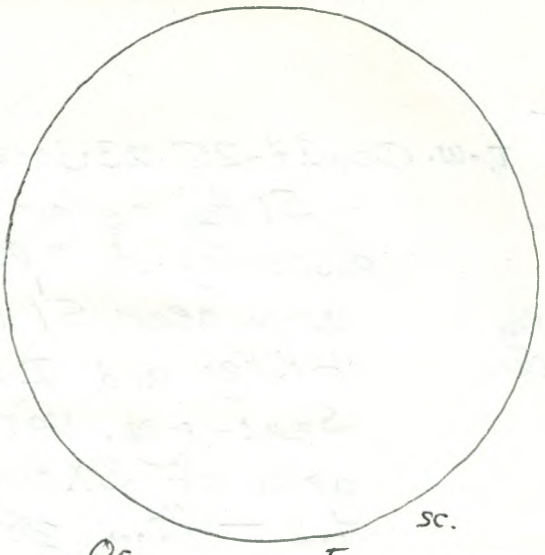
Su. Oct. 29 19:45-19:50 UT ss C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0

S-M Oct. 29-30 22:30-22:45 UT Silver Lake twl ne; 9x63b
- hoped to be able to see Venus very low in SW but did not see it. - saw Jupiter very easily ne, and Mars with binoculars in SW in twilight There were some clouds fairly low in SW. Sunset had been at about 22:01 (5:01 pm EST) or about 30 minutes before.
23:30-23:50 UT y twl and cml 9x63b
comet deVico - faintly saw Comet deVico in NW between Arcturus and handle of Big Dipper, but it was not impressive because of cloud and moonlight
R Cor Bor - finally saw R Cor Bor which seemed to be fainter than usual - heard report on my e-mail about it being fainter than usual, and finally had a chance to examine it.

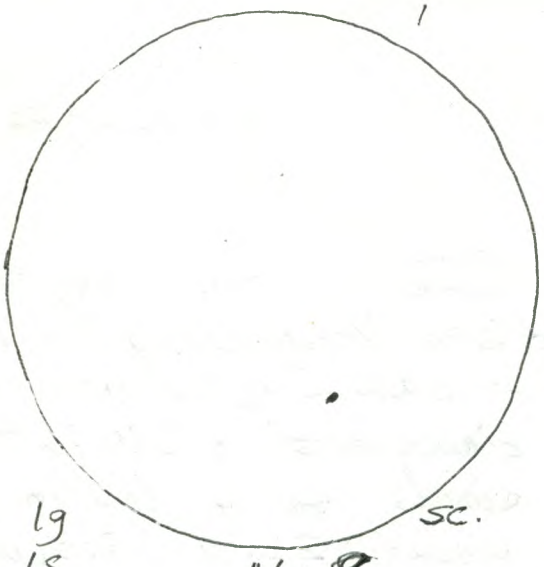
F. Nov. 3 20:35-20:40 UT C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0



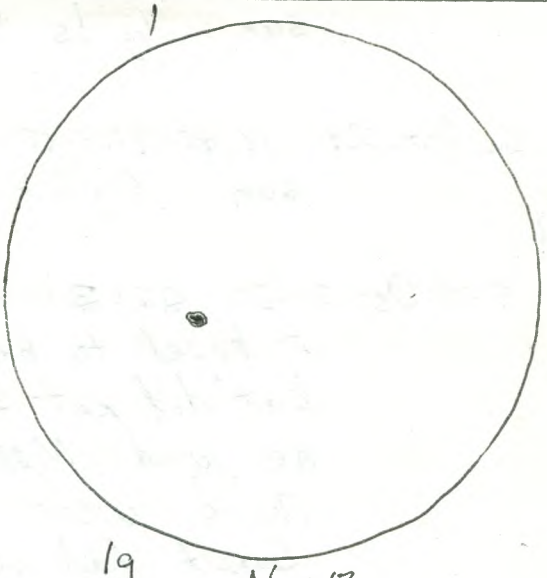
Og
Os
RSNO Nov. 4
18:42-18:45UT



Og
Os
RSNO Nov. 5
18:35-18:40UT.



lg
ls
RSNII Nov. 8
20:25-20:30UT



lg
ls
RSNII Nov. 12.
17:15-17:17UT

1995

Nov. 4 18:42-18:45 UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSNO

Sa-Su. Nov. 4-5 00:15-00:25 UT y gml ne; camcorder
Under a very bright gibbous moon I observed a few stars and tried to photograph the moon with my new camcorder but found it difficult because the moon was so bright. When clouds passed over the moon, it was possible to see some detail on the moon; otherwise there was too much glare to give sufficient detail.

Su. Nov. 5 18:35-18:40 UT SS C-8, 32, 28, 20, 15.5
sun Og Os RSNO.

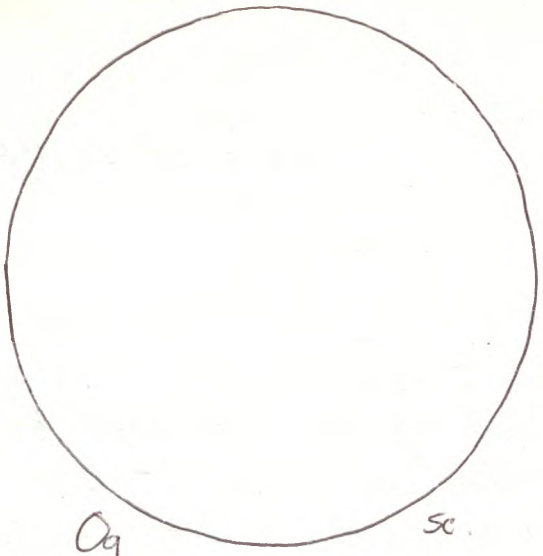
Th. Nov. 9 20:25-20:30 UT SS C-8, 32, 28, 20, 15.5
sun lg ls RSNII

Su. Nov. 12 17:15-17:17 UT SS C-8, 32, 28, 20, 15.5
sun lg ls RSNII

S.-M. Nov. 12-13 01:20-02:20 UT y S-8:T9 20x100b
- some light fog perhaps in yard; some snow on ground.
- M45, M36, M37, M38, Saturn
- 2 asteroids (See S. & T. Nov. 1995 p. 70)
(1) 7 Iris north of Aldebaran at about R.A. $4^h\ 36^m$, Dec. +26° (See U134) at about Mag. 7.4
(2) 16 Psyche, east of Aldebaran at about R.A. $5^h\ 10.5^m$, Dec. +18.3 (See U135) at about Mag. 9.8.

F.S. Nov. 17-18 03:45-04:45 UT y S-8(?)T8-9 ne; 20x100b
ne: constellations, looked for members of the Leonid Meteor Shower, but saw few. There was one beautiful bright one, with train lasting about 3 seconds, going from

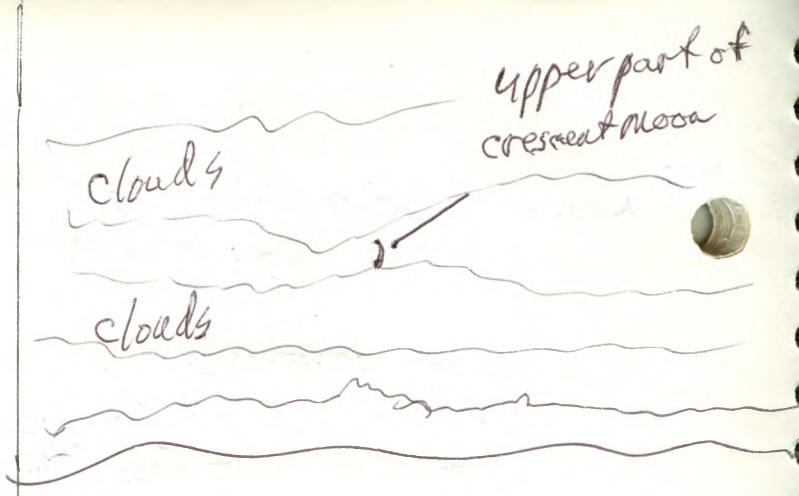
Leonid



Og
OS
RSNO

Nov. 23

SE



Silver Lake
Nov. 23: 22:15 UT

Crescent moon
30h 32m old

- crescent moon

Venus
Jupiter

SW

Nov. 24–25 22:00 UT (5:00 pm. E.S.T.)

Kingston – View from street near where Terry and Ruth Hicks live

1995

E. to near the zenith, probably through Cancer, Lynx; and maybe northern part of Auriga. It was about mag. 0 and it was about 20° in length. The time was about 09:42 UT. I may also have seen another fainter one 20x100b: M42, M43, areas of Orion, R Lep - very faint, RX Eridani. A third meteor, probably a Leonid was seen in the binoculars while I was looking at M42.

Th. Nov. 23 20:30-20:40 UT SS and south deck C-8, 32
scan Cg Cs RSNO - trees in road at solar station
- a few branches also interfering at south deck.

Th.-F. Nov. 23-24 4:45-5:25 p.m. E.S.T. 21:45-22:25 UT Silver Lake Provincial Park twl ne; 9x63b.
- went to Silver Lake Provincial Park to try to view and possibly to photograph the close approach of three planets Venus, Mars, Jupiter and the crescent moon
At 22:15 UT I saw part of the slender crescent moon and clouds. Part of the crescent could be seen for about 10 seconds or more. I did not see any of the three planets, because they were hidden behind clouds, though I scanned with the binoculars.
Snow was fairly deep and good effort was required to reach the point.
(The New Moon had been the day before Nov. 22 at 15h 43m UT.)

Moon 30h 32m old

F.-S. Nov. 24-25 22:00-22:15 UT on a street near Terry Hicks' place twl ne; 10x50b
- After going to a P.A. Day activity in Kingston I went to Terry Hicks' place and about 30 min. after sunset, Terry Ruth and I tried to see the crescent moon and "conjunction of planets" - Venus, Mars, and Jupiter. On a street in their section of town we saw the crescent moon and Venus naked-eye and Jupiter using binoculars but not Mars which apparently, from drawing in "Sky and Telescope" was "between Venus and Jupiter.

Relative Sunspot Numbers

Date 1995	My observation		AAVSO	SIDC Brussels
1230 Feb	26	25	26	26
Mar.	1	70	52	51
	2	70	57	51
	4	94	74	65
	9	0	10	10
	10	0	0	0
	12	0	10	12
	13	0	15	10
	14	11	15	10
	15	16	14	17
	18	34	44	35
	19	48	41	38
	20	52	40	41
	23	65	49	47
	24	53	44	44
	25	50	39	42
	26	30	45	41
	27	27	30	28
	28	19	20	19
	29	18	27	23
	31	17	20	22
Apr.	1	12	18	16
	2	12	20	17
	4	0	7	10
	5	0	0	0
	7	0	0	0
	10	0	8	7
	11	16	14	10
	20	14	19	25
	22	0	8	11
1260	23	0	0	0
	24	0	0	0
May	1	0	7	9
	3	0	0	8
	5	0	9	10
	8	12	9	9
	9	16	10	10
	13	21	37	26
	15	39	39	36
	18	37	37	40

Date	My observation		AAVSO	SIDC Brussels
May	20	15	24	25
	22	0	9	10
	23	0	0	0
	25	0	0	0
	26	0	0	0
	27	0	0	0
	30	0	9	10
	31	0	8	9
June	1	0	7	8
	4	15	18	14
	5	32	34	30
	6	43	28	24
	7	35	28	28
	8	31	34	28
	9	31	25	24
	12	19	20	20
	13	23	18	17
	14	0	9	12
	16	0	0	0
	17	0	8	7
	18	11	20	9
	19	12	17	18
	20	12	15	13
	21	12	15	15
	22	19	18	17
	23	14	17	16
	25	12	13	13
	26	11	13	12
	28	0	9	9
July	4	20	16	14
	5	29	24	22
1300	7	29	29	29
	11	11	17	18
	12	11	19	16
	13	0	14	9
	14	27	14	13
	15	20	18	19
	18	0	16	14
	19	23	24	21
	20	23	23	23
	24	0	0	0
	26	0	8	7
	27	0	8	8

Date	My observation		AAVSO	SIDC Brussels
July	29	0	0	0
	30	0	0	0
	31	0	12	10
Aug.	2	0	14	15
	4	0	14	16
	6	28	23	22
	7	27	17	21
	8	0	12	13
	10	0	11	10
	11	0	11	11
	12	0	7	9
	13	0	8	9
	15	0	19	15
	16	0	25	21
	17	0	17	13
	18	0	0	10
	19	0	0	0
	20	0	8	8
	21	0	0	0
	22	0	9	8
	23	31	17	15
	24	36	30	31
	25	51	35	30
	28	25	20	24
	29	12	15	14
Sept.	11	0	0	0
	12	0	11	9
	15	0	10	10
	18	0	0	10
	19	13	13	11
	28	0	10	9
	29	0	9	11
Oct.	1	0	0	0
	2	0	0	0
	11	42	44	48
	12	55	54	57
	13	42	52	58
	16	25	40	43
	17	22	38	37
	18	22	25	28
	20	22	20	18
	23	23	23	26

1995		My Observation	AAVSO	SIDE Brussels
Oct.	26	11	14	22
	29	0	8	9
Nov.	3	0	0	8
	4	0	8	0
	5	0	0	0
	9	11	10	9
	12	11	9	8
	23	0	7	9

TELESCOPE MAGNIFICATION

OCULAR in	C-14(3910^{m}FL)	C-8(2000^{m}FL)	ASTROSCAN(445^{m}FL)
55mm	71 X	36.4 X	
40	97.8	50	11.1 X
36	108.6	55.6	12.4
32	122.2	62.5	13.9
28	139.6	71.4	15.9
26	150.4	76.9	17.1
25	156.4	80	17.8
21.5	181.9	93	20.7
20	195.5	100	22.3
19	205.8	105.3	23.4
18	217.2	111.1	24.7
17	230	117.6	26.2
15.5	252.3	129	28.7
15	260.7	133.3	29.7
13	300.8	153.8	34.2
12.7	307.9	157.5	35
12.5	312.8	160	35.6
12	325.8	166.7	37.1
9	434.4	222.2	49.4
8	488.8	250	55.6
7.4	528.4	270.3	60.1
7	558.6	285.7	63.6
5	782	400	89
4	977.5	500	111.3

USEFUL MAGNIFICATION (0.2D to 2D)

354 mm	200 mm	105 mm
71X - 708X	40X - 400X	21X - 210X

STELLAR MAGNITUDES FOR COMPARISON PURPOSES

0 Capella, Vega
1 Aldebaran
1.5 Castor
2 Polaris, Alpha Andromedae
2.5 Alpha Pegasi
3 Zeta Tauri, Gamma Ursae Minoris
3.5 Alpha Trianguli
4 Mu Andromedae
4.5 Nu Andromedae, Delta Ursae Minoris
5 Chi Cassiopeiae

Local Mean Sidereal Time

For 1995:
L.M.S.T. = $6.^{h}612669774 + 0.^{h}0657098243d$
$+ 1.^{h}00273790934t - 5.^{h}11123737$

Longitude: W. 76^{o} 40' 06."818
$76.^{o}66856055$
$5.^{h}11123737$
$5^{h}\ 06^{m}\ 40.^{s}454532$

Latitude: N. 44^{o} 45' 32"
$44.^{o}758$