

Volume
18

July 24, 2001
to
March 15, 2002

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18.
Hilroy

- Heavyweight paper
- Papier épais

LEO Enright

Observing July 24, 2001 to March 15, 2002

80

Pages

26.7 x 20.3 cm

MATHS / SCIENCES

Spring
Temples



13220

2001

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

| MAY | | | | | | | JUNE | | | | | | | JULY | | | | | | | AUGUST | | | | | | |
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| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 27 | 28 | 29 | 30 | 31 | | | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 29 | 30 | 31 | | | | | 26 | 27 | 28 | 29 | 30 | 31 | |

| SEPTEMBER | | | | | | | OCTOBER | | | | | | | NOVEMBER | | | | | | | DECEMBER | | | | | | | | | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
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| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | | | | | |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 28 | 29 | 30 | 31 | | | | 25 | 26 | 27 | 28 | 29 | 30 | 30 | 31 | | | | | | | | | | | | | | | | | | | | |

2002

| JANUARY | | | | | | | FEBRUARY | | | | | | | MARCH | | | | | | | APRIL | | | | | | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|-------|----|----|----|----|----|----|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|
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| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | | | | |
| 27 | 28 | 29 | 30 | 31 | | | 24 | 25 | 26 | 27 | 28 | | | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 28 | 29 | 30 | | | | | 28 | 29 | 30 | | | | | | | | |

| MAY | | | | | | | JUNE | | | | | | | JULY | | | | | | | AUGUST | | | | | | |
|-----|----|----|----|----|----|----|------|----|----|----|----|----|----|------|----|----|----|----|----|----|--------|----|----|----|----|----|----|
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| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 26 | 27 | 28 | 29 | 30 | 31 | | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 28 | 29 | 30 | 31 | | | | 25 | 26 | 27 | 28 | 29 | 30 | 31 |

| SEPTEMBER | | | | | | | OCTOBER | | | | | | | NOVEMBER | | | | | | | DECEMBER | | | | | | | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|--|--|--|--|--|---|---|---|---|---|---|---|
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| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | | | | | | | | | | | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | | | | | | | | | | | |
| 29 | 30 | | | | | | 27 | 28 | 29 | 30 | 31 | | | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 29 | 30 | 31 | | | | | | | | | | | | | | | | |

Observing Log

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

Time:

UT = Universal Time

n = night

m = morning

p = forenoon

a = afternoon

e = evening

Places:

OO = Oso Observatory

nd = north deck

sh = shoreline of lake

SS = solar station

t = table at solar station

in = indoors

r = roof of house

ice = ice on lake

sd = south deck

y = yard

FL = Florida: -la = laneway.

-by = backyard

-at = the condo

-pl = the swimming pool

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

Instruments:

C14 = Celestron 14 - 35.5cm SCT

C8 = Celestron 8 - 20cm SCT

Ast = Astroscan 2001 - 10.5cm RFT

12 $\frac{1}{2}$ " = Denise's 32cm Meade Dobsonian

20x100b = 20x100 binoculars

11x80b = 11x80 binoculars

9x63b = 9x63 binoculars

7x35b = 7x35 binoculars

18x50ISb = 18x50 IMAGE STABILIZED binoculars

32 = 32mm ocular

32-2 = 32mm 2" ocular

K = Kellner

O = Orthoscopic

Ko = König

WA = Wide Angle

P = Plossl

ph = photography

p/b = piggyback

o/a = off axis

Ba = Barlow

A.P.F = Astro-Physics Solar Filter

T.O.F = Thousand Oaks Solar Filter

EG = Easy Guider

EGf = Easy Guider, lens forward

EGb = 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

⊗ FL = 1525mm D = 318mm FR = f/4.8

Atlases:

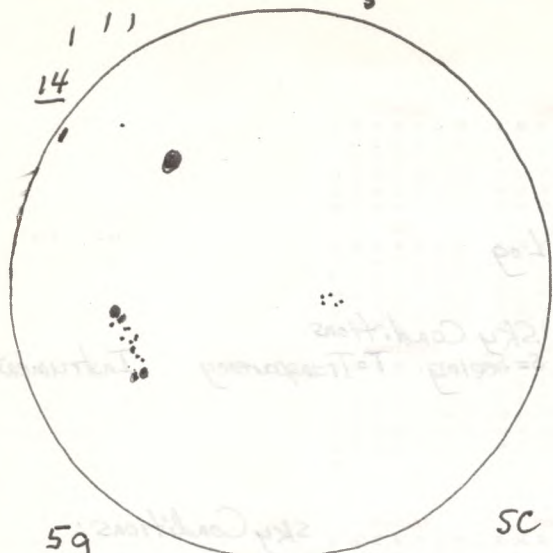
U = Uranometria 2000.0

U210 = Uranometria 2000.0 Chart 210

AAUSO = AAUSO Variable Star Atlas

Cam = Cambridge Star Atlas 2000.

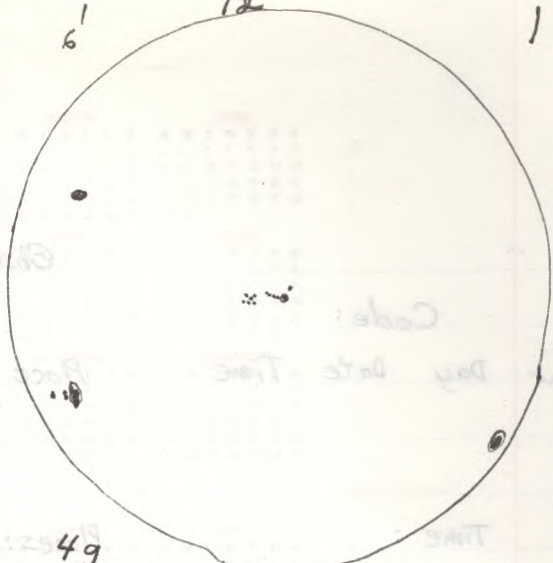
MSA = Millennium Star Atlas.



59
225
RSN72

July 24
16:10-16:15UT

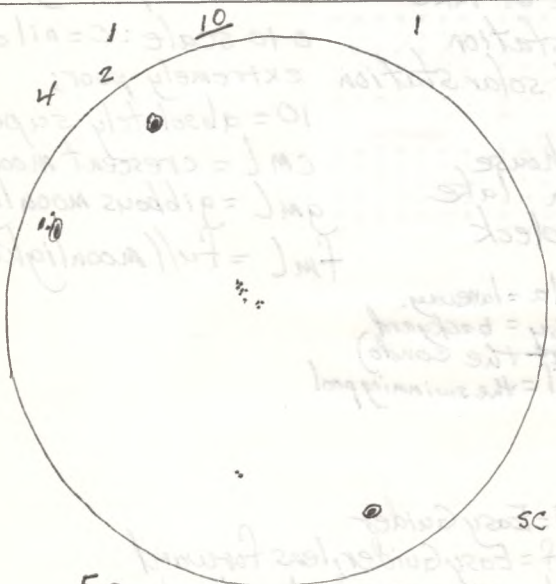
SC



49
205
RSN60

July 26

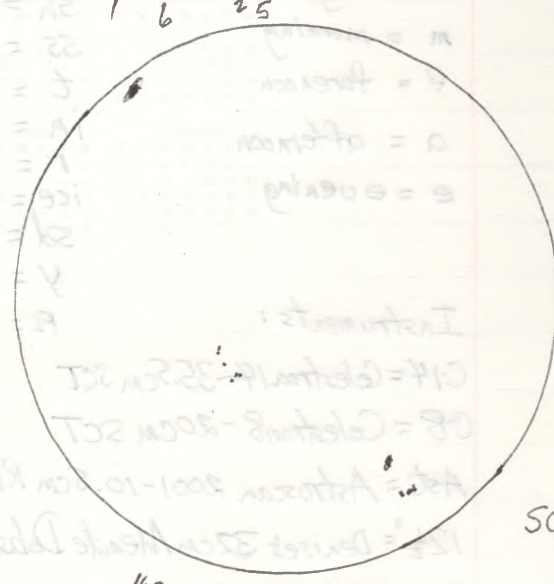
1



59
185
RSN68

July 27
13:30-13:35UT

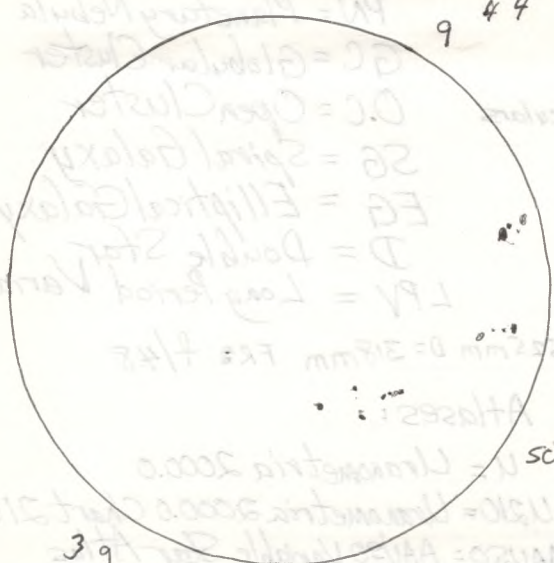
SC



49
145
RSN54

July 28
14:00-14:05UT

SC



39
175
RSN47

July 30
17:30-17:35UT

SC

2001 Tu. July 24 16:10-16:15 UT t C-8, 32
sun 5g 22S RSN 72 T.O.F.

Tu.-W. July 24-25 03:10-04:25 UT y 5-8 T9-9.5 ne; 18X50 15b
ne: Mars very bright in S, about 3 meteors - 2 of them
very bright and probably members of the S Aquarid
shower - one near the star Benetnash in UMa was
probably mag. -5. There may also have been a
"point-meteor" near the Square of Pegasus. There was a
fairly bright glow in the N. up about 20° with
hints of vertical bands - that may have been
Auroral.

18X50 15b: M11, M16, M17, M18, M23, M24, M25, M8, M20, M21, M22,
M28, M13, R Cor Bor, T Cor Bor, Barnard's Star,
Comet LINEAR (C/2001 A2) in Pegasus about 3°
N. of the star Enif.

Photographing: area of Mars in S, and other areas of the sky

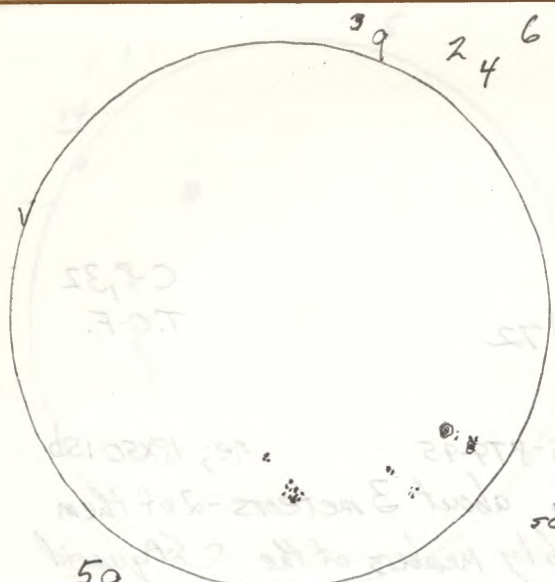
W.-Th. July 25-26 03:20-03:25 UT nd SPT 7-8 (cmb, some cloud) ne
- Mars in S, bright stars of summer

Th. July 26 17:30-17:35 UT t C-8, 32
sun 4g 20S RSN 60 T.O.F.

F. July 27 13:30-13:35 UT t C-8, 32
sun 5g 18S RSN 68 T.O.F.

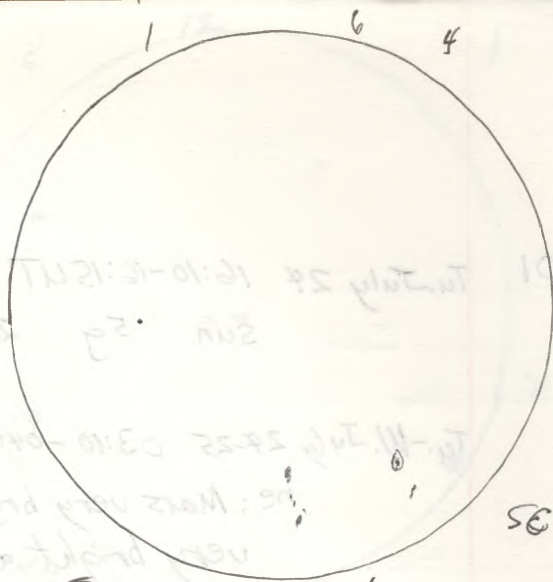
Sa. July 28 14:00-14:05 UT t C-8, 32
sun 4g 14S RSN 54 T.O.F.

M. July 30 17:30-17:35 UT C-8, 32
sun 3g 17S RSN 47 T.O.F.



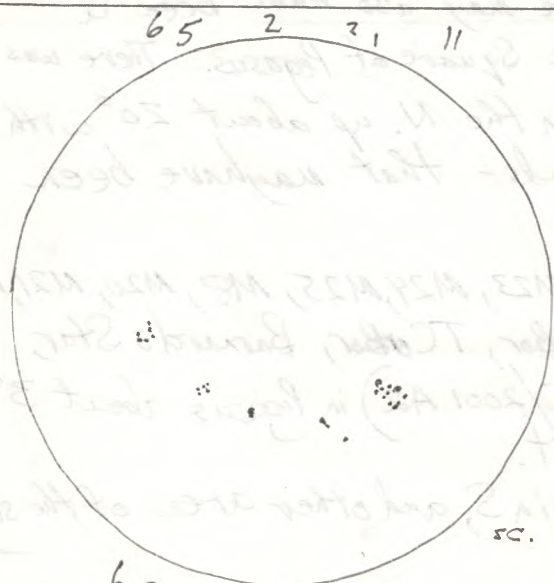
59
255
RSN 74

July 31
15:35-15:40 UT



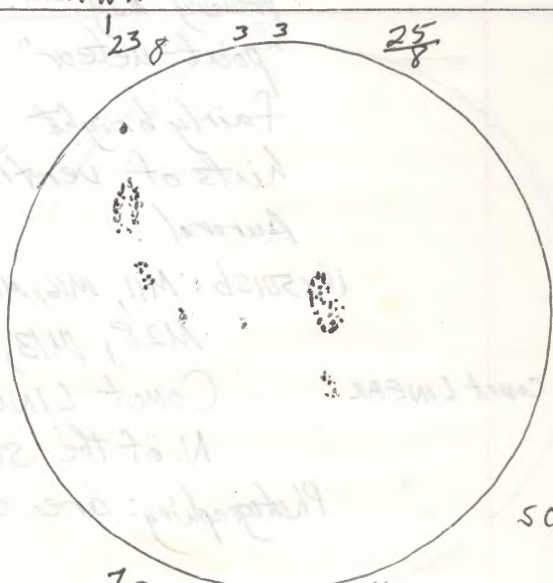
39
H.S.
RSN 44

Aug. 1
14:45-14:50 UT



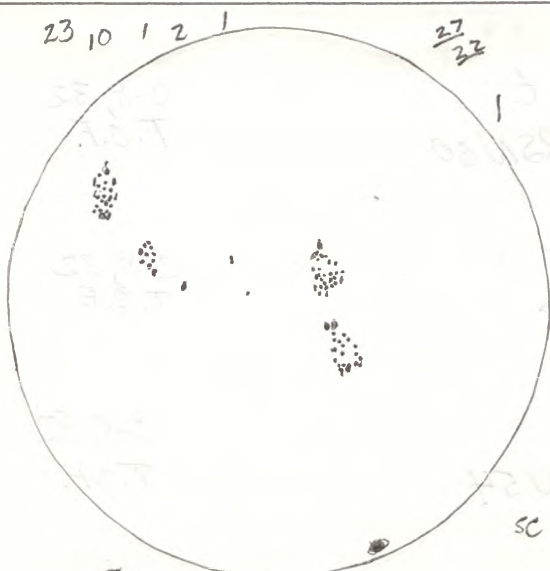
69
275
RSN 87

Aug 3
14:05-14:10 UT



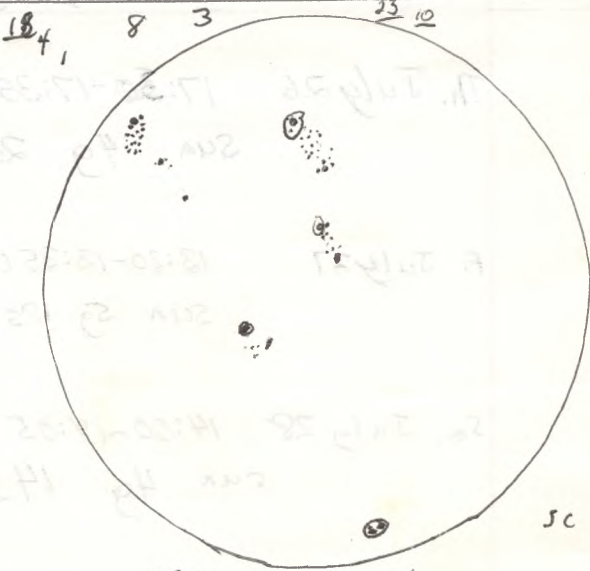
79
715
RSN 141

Aug. 4
14:50-14:55 UT



89
813
RSN 167

Aug. 5
14:50-14:55 UT



79
675
RSN 137

Aug. 6
14:35-14:45 UT

2001

Tu. July 31 15:35-15:40 UT t C-8, 32
 sun 5g 24s RSN 74 T.O.F.

W. Aug. 1 14:45-14:50 UT t C-8, 32
 sun 3g 11s RSN 41 T.O.F.

F. Aug. 3 14:05-14:10 UT t C-8, 32
 sun 6g 27s RSN 87 T.O.F.

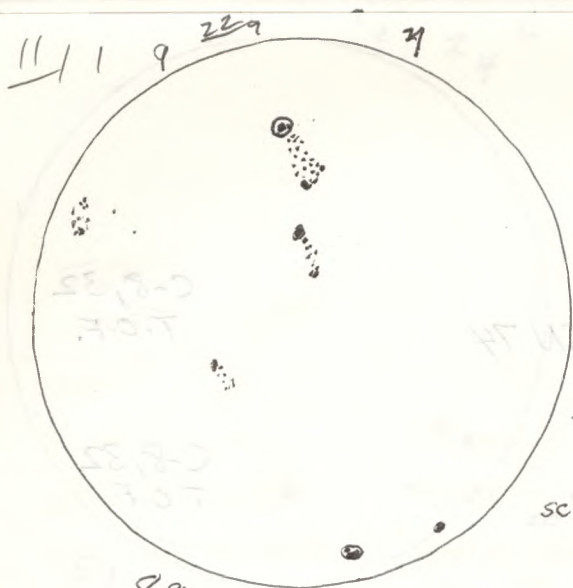
Sa. Aug. 4 14:50-14:55 UT t C-8, 32
 sun 7g 71s RSN 141 T.O.F.

Sa-Su. Aug. 4-5 00:00-01:30 UT near Myers Cave Gneiss Hill Observatory twl ne; 10" Newtonian

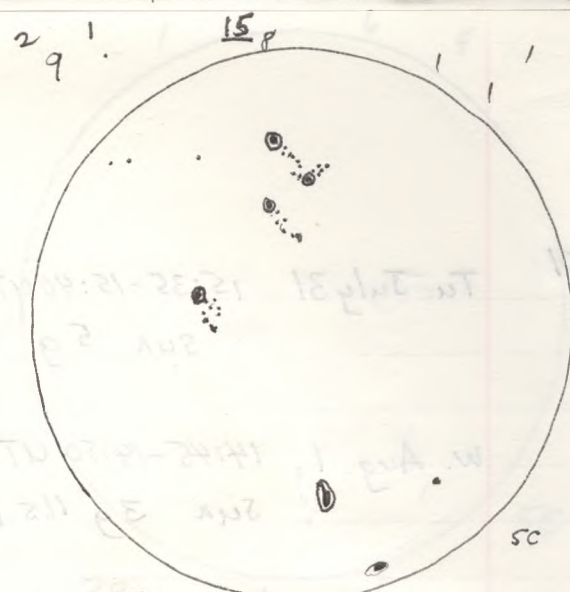
At the First Light Ceremony at Guy Nason's Gneiss Hill Observatory near Myers Cave, Ontario, I joined others on a very clear night for a meal that was served and a chance to talk with other local people and those who had helped build the observatory. Ed and Helea Yaach were there and I sold them a book. The observatory was a split-roof-roll-off-roof observatory in which one-half or both halves could roll either way - north or south. Guy gave a short speech to thank those who had helped him with the project. Then he and a young local lad unveiled the plaque on the side of the building. The 10" Newtonian telescope was on Mars. The view was acceptable - considering the fact that Mars was low in the S.

Sun Aug. 5 14:50-14:55 UT t C-8, 32
 sun 8g 87s RSN 167 T.O.F.

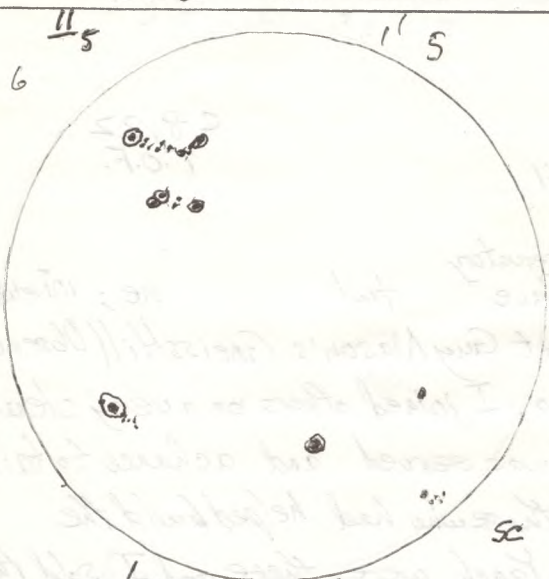
M. Aug. 6 14:35-14:45 UT t C-8, 32
 sun 7g s RSN T.O.F.



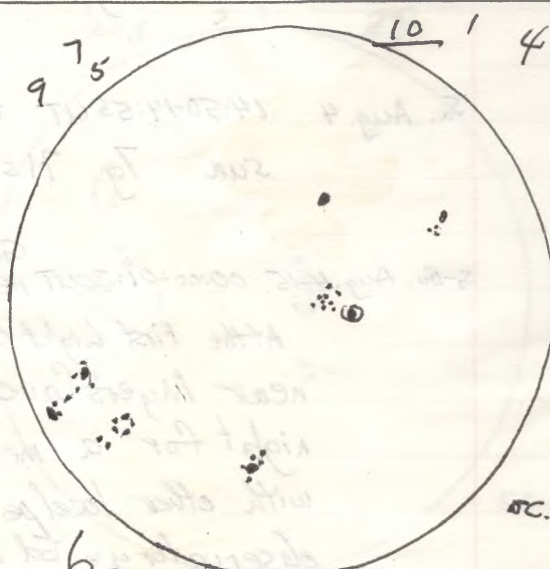
89
565
RSN 136
Aug. 7.
14:15-14:25 UT



89
385
RSN 118
Aug. 8
13:40-13:45 UT



69
295
RSN 89
Aug. 9
17:15-17:20 UT



69
365
RSN 46
Aug. 11.
22:10-22:15 UT

2001

Tu. Aug. 7 14:15-14:25 UT t

sun 8g 56s RSN 136

C-8,32
T.O.F.

T.-w. Aug. 7-8 02:50-03:25 UT y s-8(?) T7 (gml) ne

- summer constellations; Mars bright in S.; gibbous moon which had risen at about the time of the end of astronomical twilight (i.e., at about 02:22 UT).

w. Aug. 8 13:40-13:45 UT t

sun 8g 38s RSN 118

C-8,32
T.O.F.

Th. Aug. 9 17:15-17:20 UT t

sun 6g 29s RSN 89

C-8,32
T.O.F.

Th.-F. Aug. 9-10 01:25-02:30 UT s-8(?) T6-7 (haze, some cloud) ne

- Andy Vandesaad and I observed the summer sky during twilight hoping to see the International Space Station, but we did not knowingly see it. It was supposed to appear in the NW at 01:31 UT (9:31 p.m. E.D.T.). Andy saw one Perseid Meteor. The planet Mars was visible in the S., and the bright stars of summer could be seen, but the sky gradually became hazier.

F. Aug. 10 23:10-23:15 UT Huronia Star Party

sun 6g 36s RSN 96 (Alex's telescope)

Meade ETX +26mm
Bader Filter

F.-S. Aug. 10-11 01:00-04:15 UT Huronia Star Party S8:T8.5-9 ne; huge 22" reflector

ne: Mars, many stars under good conditions except for glow from Toronto and Alliston in SE and from Barrie in NE, International Space Station at 02:12 UT, several bright

Perseid Meteors

22" reflector: ^{owned by Jim Kendrick} beautiful edge-on galaxy in northern part of the sky
- talked to Day family from Barrie - parents and a daughter - and made suggestions about what they might

Auriga

Saturn

Aldebaran

Taurus

Jupiter

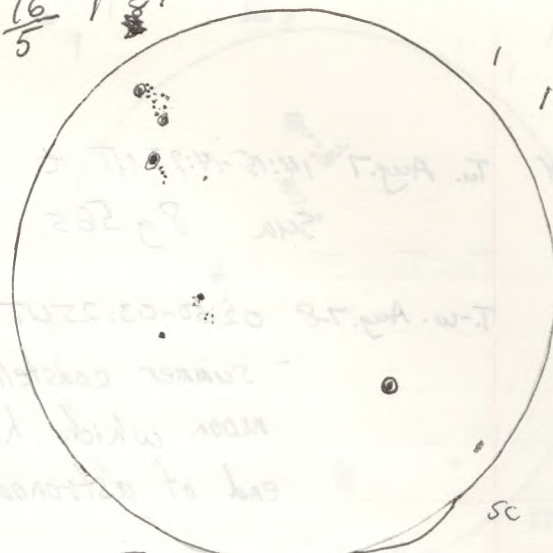
Venus

Orion Rising

E

Planets in E in twilight at 09:00UT
on Aug. 11 and Aug. 11 at Huronia.

16/5 1381



SC

79
335
RSN 103
Aug 14
13:40-13:45

be able to see in their small telescope. - stopped viewing the sky at about the time the moon rose, and could see it among the trees in the E. before going to sleep in the vehicle, since I had not brought the sleeping bag and did not want to sleep in the tent.

M 09:00-09:05 UT - In the E. - saw Jupiter, Saturn, Venus in twilight (see diagram)

S.-S. Aug. 11-12 01:40-04:20 UT Huronia Star Party ne; large 16(?) or 12(?) reflector

ne: Mars; many bright stars after the clouds cleared away (They had seemed to be a temporary threat.) International Space Station at 02:51 appearing below cup of the Big Dipper and moving to the NE.; a number of bright Perseids large 16(?) or 12(?) reflector, probably owned by a member of the South Simcoe Amateur Astronomers: beautiful view of the Veil Nebula (This was after Bob Beland's talk on his astrophotography.)

M. 09:00-09:05 UT - In the morning twilight I had another beautiful view of the array of planets in the Eastern sky. (See the diagram.)

S.-M. Aug. 12-13 02:05-03:50 UT nd, y SST 9-9.5 ne; 18x50 15b

Auroral glow.

ne: Mars, constellations of summer, a few Perseids, Auroral glow in N. - up 20° or more

18x50 15b: M16, M17, M18, M23, M24, M25, M28, M20, M21, M8, areas of Uranus and Neptune

- photographed areas of Mars and other areas.

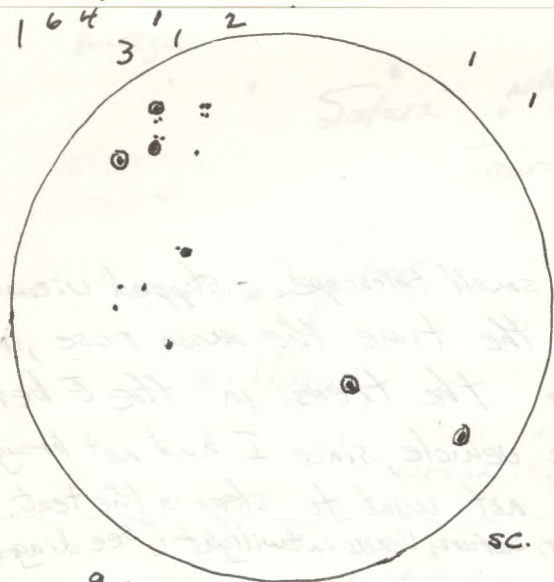
M.-T. Aug. 13-14 02:35-03:00 UT y and nd S-7-8(?) T 9-9.5 ne

- Mars in S., bright stars of summer

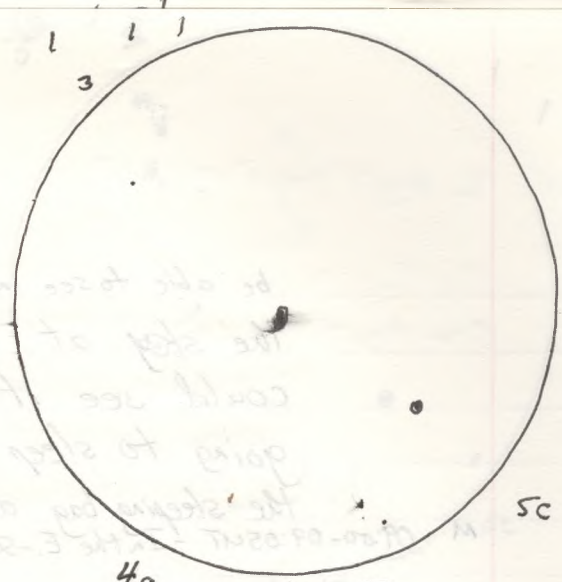
- photographed area of Mars from yard and from the dock

04:10-04:40 UT nd, y, t S-7-8(?) T 9-9.5 18x50 15b

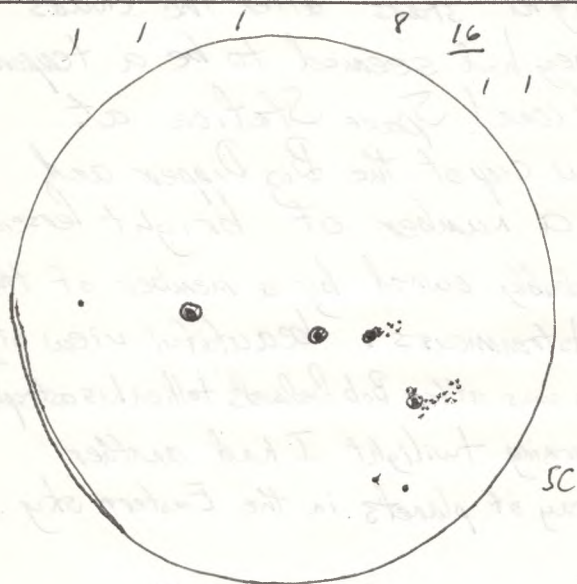
- M16, M17, M18, M24, M25, M11, M22, M28, M13, area of M57, area of M81 and M82, Alcor and Mizar, Barnard's Star,



99
205
RSN 110
Aug. 16
15:20-15:25 UT



49
65
RSN 46
Aug. 17
13:35-13:40 UT



79
295
RSN 79
Aug. 18
16:35-16:40 UT

2001.

T Cor Bor, R Cor Bor, IC4665, areas of Uranus and Neptune.

Tu. Aug. 14 13:40 - 13:45 UT t C-8, 32
sun 7g 33S RSN103 T.O.F.

T-W. Aug. 14-15 01:55 - 03:25 UT y S-8(?) T9-9.5 ne; 18X5015b
ne: Mars, a couple of meteors, one at least of which was a
Perseid

18X5015b: M11, M13, M16, M17, M18, M20, M21, M22, M23, M24, M25,
M28, M8, M15, M57 area, areas of Uranus and Neptune,
R Cor Bor, T Cor Bor, Barnard's Star, area of M81 and M82.
Alcor and Mizar.

- photographing: area of Mars in S.; Sagittarius, Capricornus,
and Big Dipper.

W. Aug. 15 15:20 - 15:25 UT t C-8, 32
sun 9g 20S RSN110 T.O.F.

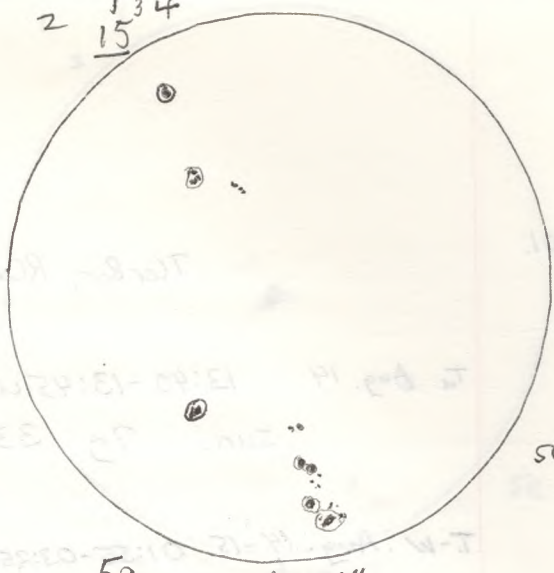
W-Th. Aug. 15-16 03:10 - 03:50 UT y S-8(?) T8-9 ne; 18X5015b
ne: stars of summer
18X5015b: M11, M16, M17, M18, M22, M28, M8, M20, M23,
M24, M25, M15, Barnard's Star, T Cor Bor,
M80, M81, area of Uranus and Neptune, M31,
M33, M15.

F. Aug. 17 13:35 - 13:40 UT t C-8, 32
sun 4g 6S RSN46 T.O.F.

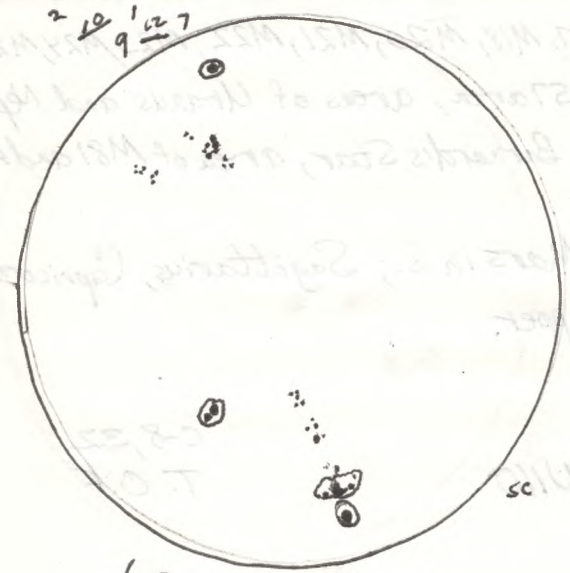
Sa. Aug. 18 16:35 - 16:40 UT t C-8, 32
sun 7g 29S RSN99 T.O.F.



69
425
RSN102
Aug. 22
13:35-13:40UT



59
255
RSN 75
Aug. 24
14:25-14:30UT



69
415
RSN101
Aug. 25
14:15-14:20UT

2001 W. Aug. 22 13:35-13:40 UT

sun 6g 42s RSN 102

C-8, 32.
T.O.F.

W-Th. Aug. 22-23 03:25-04:15 UT nd S-8(?) T 6-8 (some cloud, some haze, N) ne

- bright stars and constellations of summer, one meteor in the S., Algol at, or very near, minimum.

Th-F. Aug. 23-24 03:40-04:05 UT nd S-8(?) T 9

ne; 18x50ISb

ne: bright stars and constellations of summer

18x50ISb: area of M81 and M82, M31, M33, IC 4665,

areas of Cygnus near Deneb, looking for the

newly discovered nova - Nova Cygni

but not sure of seeing it, though it may have been

seen. The area was near the zenith and difficult to observe with hand-held binoculars.

F. Aug. 24 14:25-14:30 UT t

sun 5g 25s RSN 75

C-8, 32
T.O.F.

F.S. Aug 24-25 01:15-03:50 UT 00 S-8(?) T 9-9.5(!) ne; 18x50ISb; 20x100b

ne: Mars in S.; bright stars and summer constellations, a

Persid meteor of about mag. 3 at about 01:18 UT

18x50ISb: M15, M22, M28, M8, M20, M21, the

recently discovered nova in Cygnus at

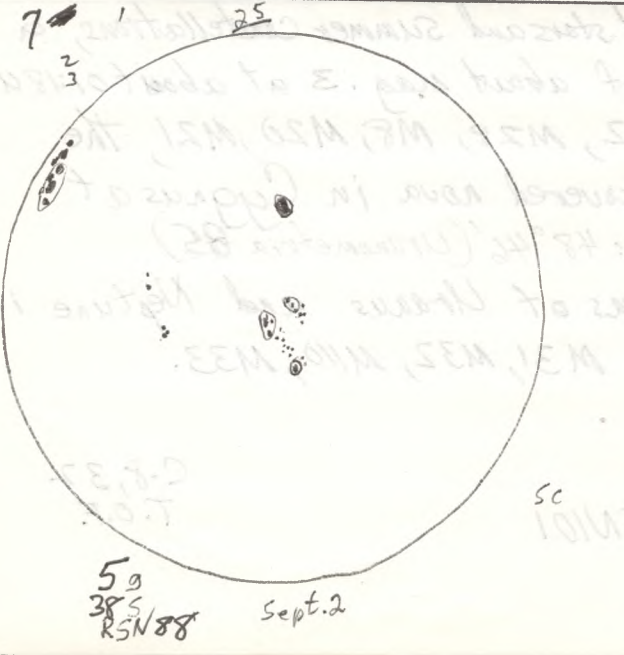
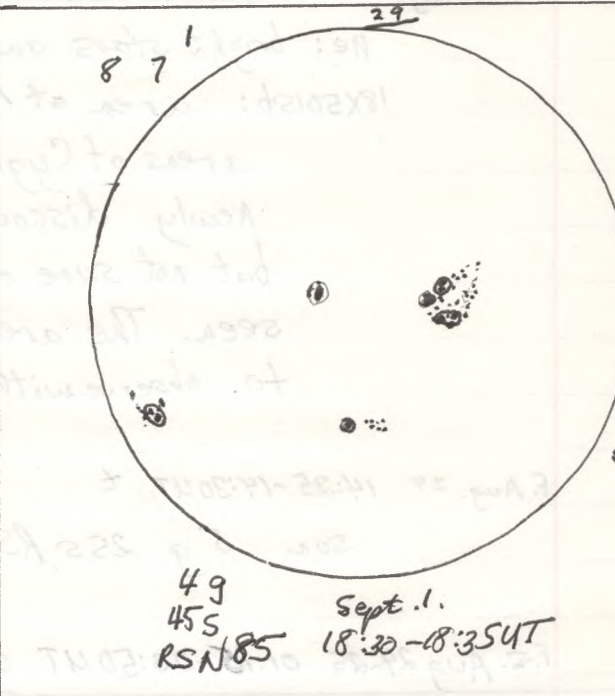
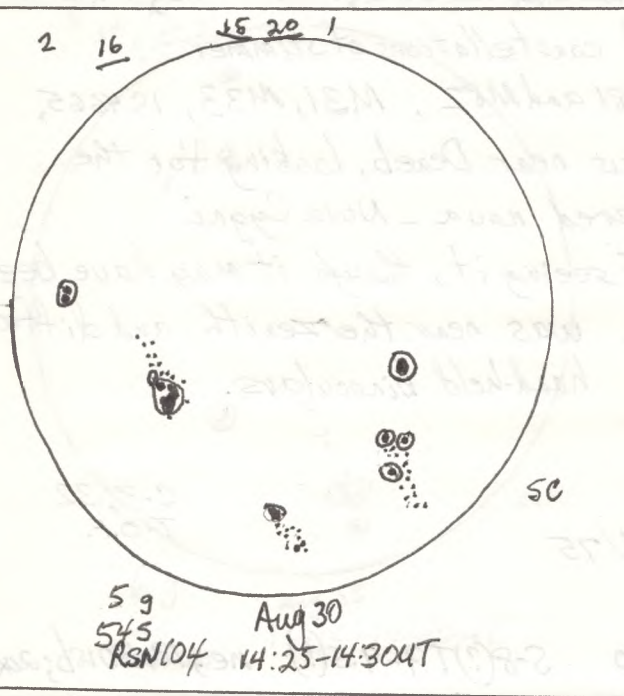
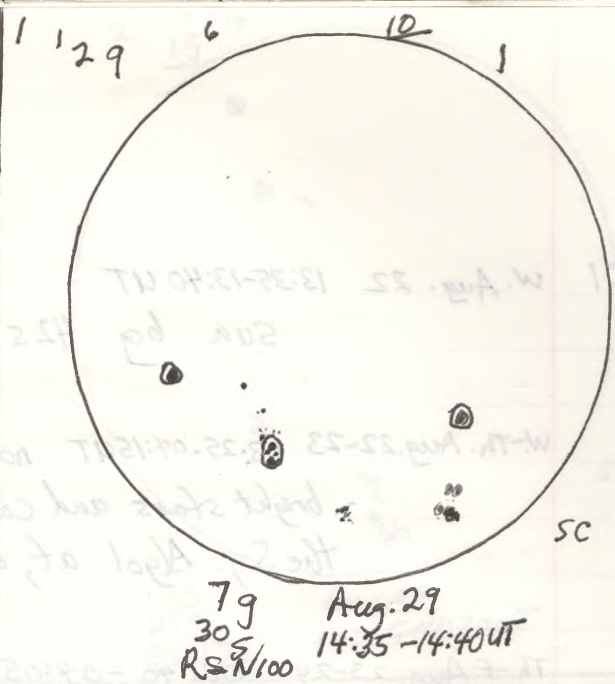
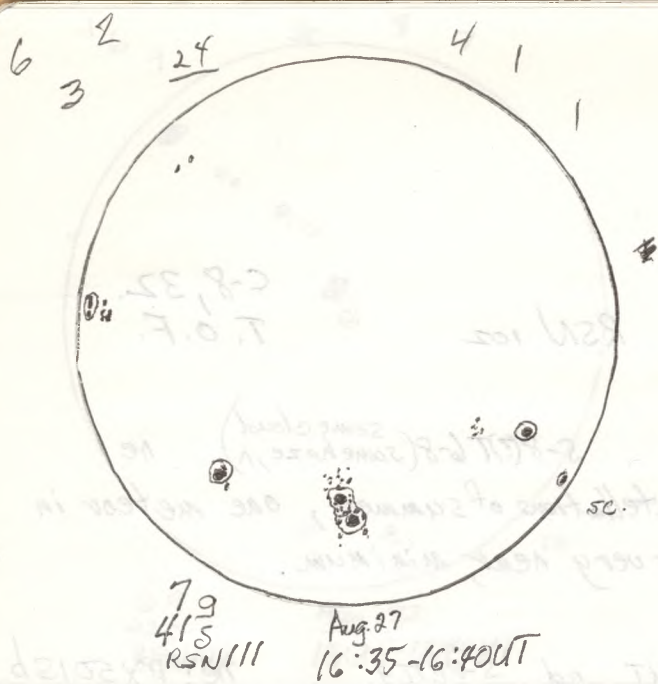
R.A.: $21^{\text{h}} 3^{\text{m}}$ Dec.: $48^{\circ} 46'$ (Uranometria 85)

20x100b: M11, areas of Uranus and Neptune in Capricornus, M31, M32, M110, M33.

Sa. Aug. 25 14:15-14:20 UT

sun 6g 41s RSN 101

C-8, 32
T.O.F.



2001 Sa.-Su. 01:00-03:45 UT 00 s8(?)T7 (f.g.m.l.) ne; 20x100b.

ne: stars of summer, Mars, first quarter moon.

20x100b: lunar craters, areas of Neptune and Uranus, M15
M31, M32, M110, M33.

Guy Nasoa and his brother-in-law, John, visited and observed during the first half, or so, of the session.

M. Aug. 27 16:35-16:40 UT t
sun 7g 41s RSN 111

C-8, 32
T.O.F.

W. Aug. 29 14:35-14:40 UT t
sun 7g 30s RSN 100

C-8, 32
T.O.F.

W.-Th. Aug. 29-30 03:15-03:45 UT nd s-8(?)T7 (g.m.l.) ne
- bright stars, esp. in the N. sky, Mars in the south

Th. Aug. 30 14:25-14:30 UT t
sun 5g 54s RSN 104

C-8, 32
T.O.F.

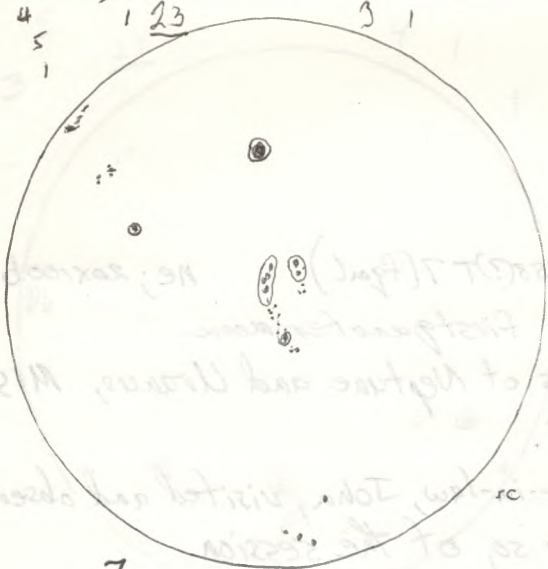
Sa. Sept. 1 18:30-18:35 UT t
sun 4g 45s RSN 85

C-8, 32
T.O.F.

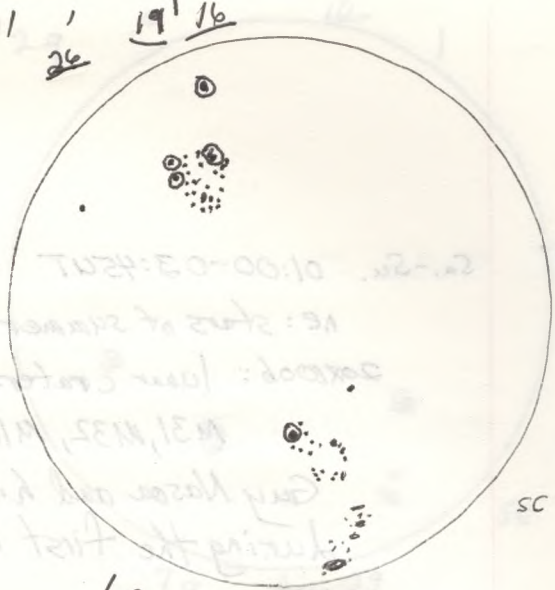
Sa.-Su. Sept. 1-2 00:30-02:30 UT 00 s-8(?)T5-6 (f.m.l.) ne; 20x100b
ne: Mars in S.; bright stars of summer
20x100b: area of Mars, M13, M22, M8, area of M20 and
M21, Double Cluster, Alcor and Mizar and area.
- tried out the newly-acquired Kendrick
Dew Removal equipment I had bought for the
20x100 binoculars. It seemed to work satisfactorily.

Su. Sept. 2 14:35-14:40 UT
sun 5g 38s RSN 88

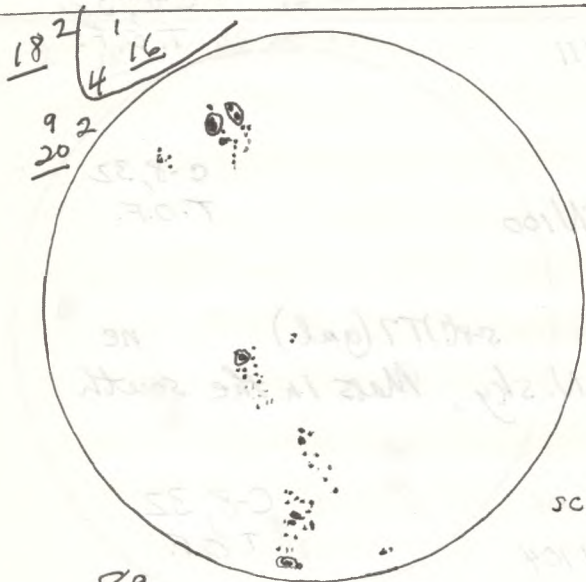
C-8, 32
T.O.F.



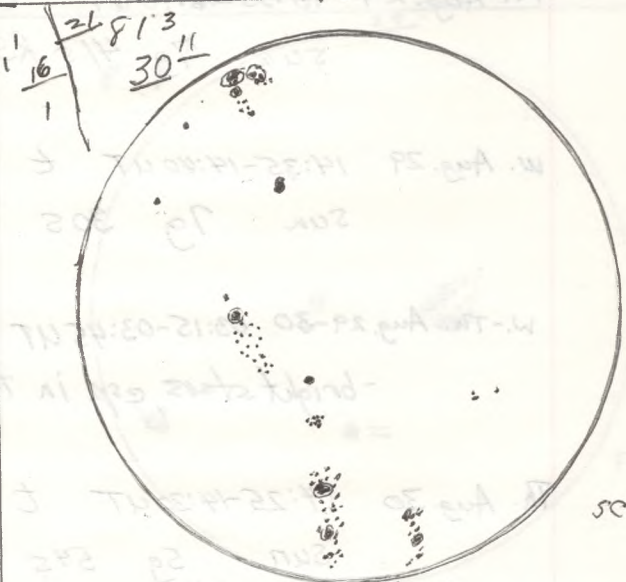
79
385
RSN108 Sept. 3
13:30-13:35 UT



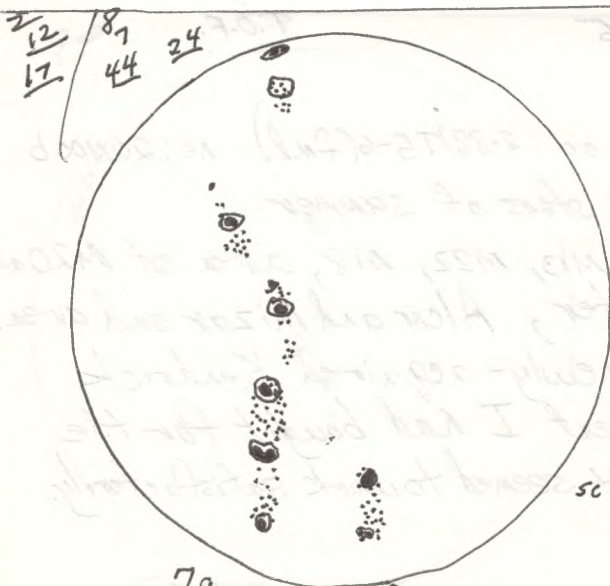
69
645
RSN124 Sept. 5
14:55-15:00 UT



89
725
RSN152 Sept. 6
14:00-14:10 UT



109
935
RSN193 Sept. 7
14:35-14:45 UT



79
1145
RSN Sept. 9
14:20-14:25 UT

2001 S.-M. Sept. 2-3 00:30-01:40 UT y S-8(?)T6 (f.m.l.) ne; 18X501sb
ne: Mars in S.; bright stars of summer
18X501sb: area of Mars, M8, M11, area of M20 and 21,
areas of Cygnus

M. Sept. 3 13:30-13:35 UT t C-8, 32
Sun 7g 38s RSN108 T.O.F.

T.-W. Sept. 4-5 02:35-02:45 UT nd S-8T6-7 (some cloud; g.m.l.) ne
- bright stars of summer

W. Sept. 5 14:55-15:00 UT t C-8, 32
Sun 6g 64s RSN124 T.O.F.

W.-Th. Sept. 5-6 02:30-03:10 UT nd S-8(?)T6-7 (g.m.l.) ne
- Mars in SSW; bright stars of summer

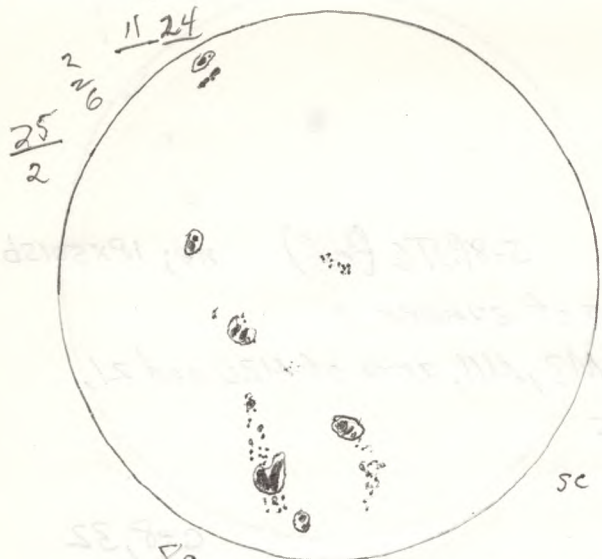
Th. Sept. 6 14:00-14:10 UT t C-8, 32
Sun 8g 72s RSN152 T.O.F.

Th.-F. Sept. 6-7 01:30-02:10 UT nd and y ne
- Mars in SSW; bright stars of summer.

F. Sept. 7 14:35-14:45 UT C-8, 32
Sun 10g 93s RSN193 T.O.F.

Sa-Su. Sept. 8-9 01:40-01:50 UT nd and y S-8(?)T7 (some cloud) ne
- Mars in SSW; bright stars of summer.

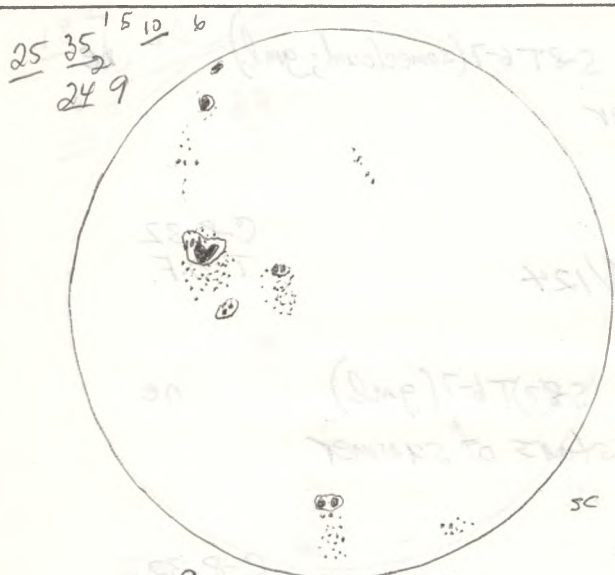
Su. Sept. 9 14:20-14:25 UT t C-8, 32
Sun 7g 114s RSN184 T.O.F.



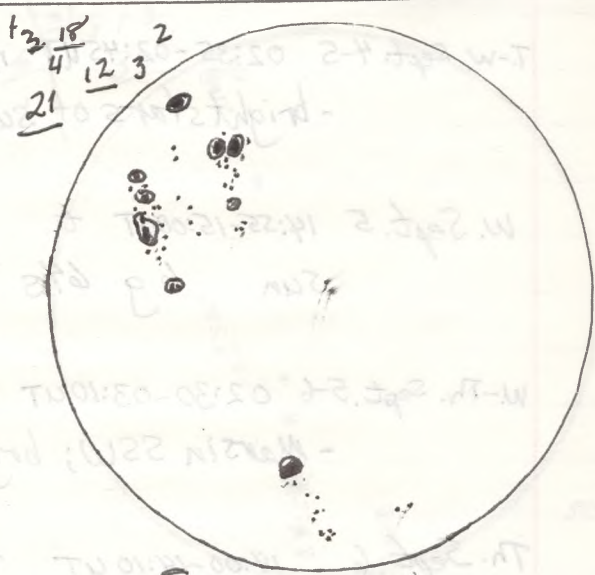
89
 779
 RSN157
 Sept. 11
 15:40 - 15:45 UT



89
 855
 RSN165
 Sept. 12
 18:00 - 18:05 UT



99
 175
 RSN207
 Sept. 13
 14:50 - 15:00 UT



89
 645
 RSN144
 Sept. 14
 15:00 - 15:10 UT



99
 645
 RSN154
 Sept. 15
 15:30 - 15:40 UT

2001

M.-T. Sept. 10-11 03:20-04:00 UT nd and y S-8(?) T9-9.5! ne; 18x50 ISb

ne: bright stars of late summer

18x50 ISb: M2, M15, Uranus and area, Neptune and area, M11 and R Scuti, Barnard's Star and area, M45, M57 and area, E and EU Del, Double Cluster, Alcor and Mizar and area, M13, M92, M31, M32, M110, M33

Tu. Sept. 11 15:40-15:45 UT t

sun 8g 77s RSN 157

C-8, 32
T.O.F.

T.-W. Sept. 11-12 01:50-03:50 UT 00 S8(?) T9-9.5! ne; 20x100b

ne: Mass in SSW; bright stars; Pleiades at end of session

20x100b: M33, M31, M32, M110, Uranus and area, Neptune and area, M2, M15, M11 and R Scuti, M71, M27, T Cor Bor, R Cor Bor, M13, Barnard's Star and area.

W. Sept. 12 18:00-18:01 UT t

sun 8g 85s RSN 165

C-8, 32
T.O.F.

Th. Sept. 13 14:45-15:00 UT t

sun 9g 117s RSN 207

C-8, 32
T.O.F.

F. Sept. 14 15:00-15:10 UT t

sun 8g 64s RSN 144

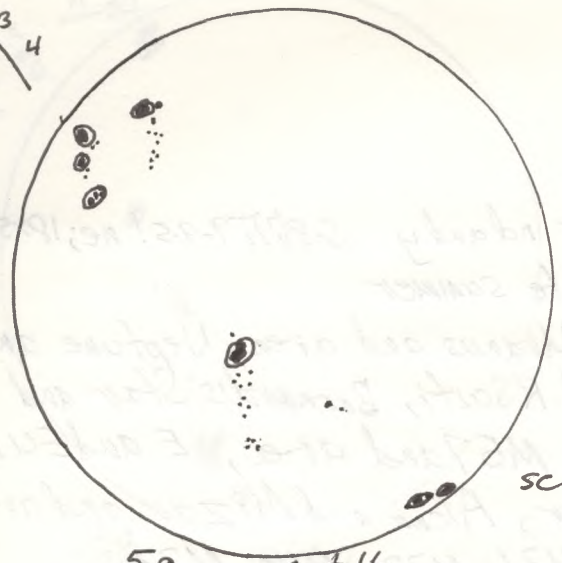
C-8, 32
T.O.F.

Sa. Sept. 15 15:30-15:40 UT t

SUN 9g 64s RSN 154

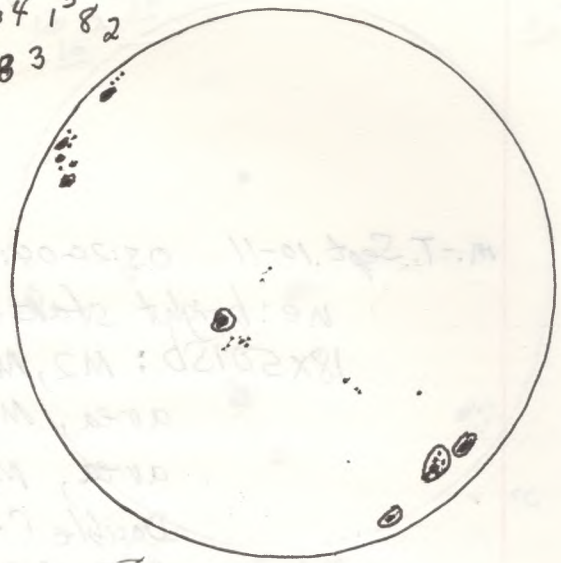
C-8, 32
T.O.F.

16 3
11 4
9



59
435
RSN93
Sept. 16
14:35-14:40UT

84 13 82
83



89
375
RSN117
Sept. 17
15:40-15:45

2001

Sa.-Sun Sept. 15-16 02:10-03:40 UT 00 S8(?) T 8.5-9 ne; 20x100b

ne: bright stars of late summer; β Lyrae near or at max.; δ Cep near or at max.

20x100b: Uranus and area, Neptune and area, M31, M32, M110, M33, M11 and R Scuti; M27, M57, Barnard's Star and area, β Cyg, M13, M92, M81 and M82, Double Cluster, α Per Cluster, M2, M15.

Su. Sept. 16 14:35-14:40 UT t

C-8, 32

Sun 5g 43s RSN 93

Su.-M. Sept. 16-17 01:30-03:30 UT y S-8 T 9.5! ne; 18x50 15b

ne: bright stars, Mars in Sgr in SSW, Double Cluster, M31, one faint meteor in NE about mag. 4.

18x50 15b: Uranus and area, Neptune and area, M2, M22, M11 and R Scuti, M27, M71, M57, ϵ Lyr, M16, M17, M18, M24, M25, Barnard's Star and area, IC 4665, M13, M92, M81 and M82, T Cor Bor, R Cor Bor, Alcor and Mizar, Kemble's Cascade, Double Cluster in Per, μ Cep and area, M31, M32, M110, M33, M45

M. Sept. 17 15:40-15:45 UT t

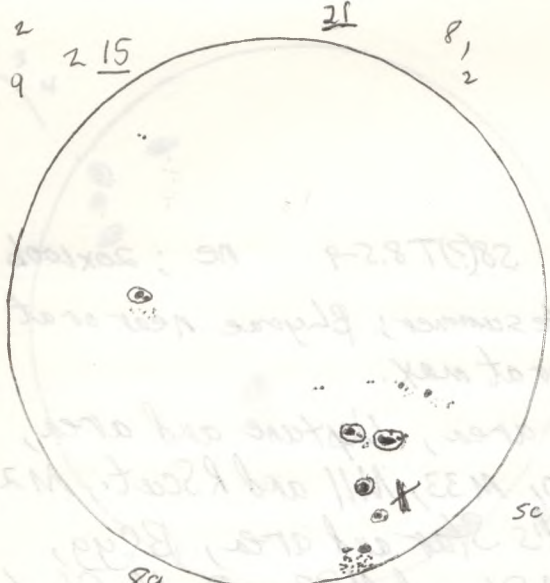
C-8, 32

Sun 8g 37s RSN 117

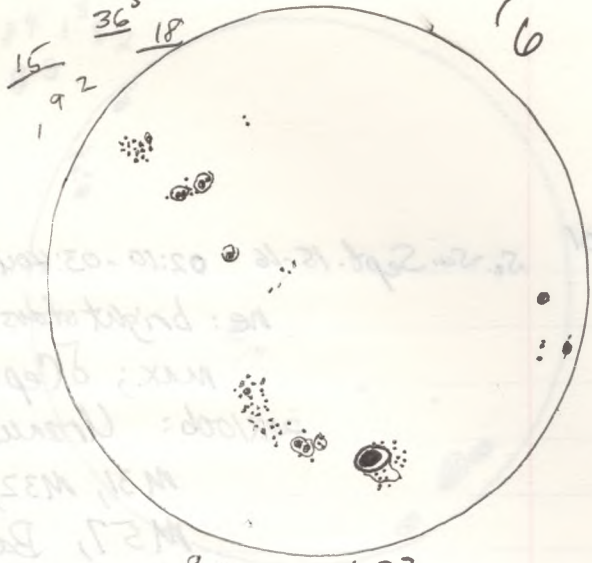
T.O.F.

T.-W. Sept. 18-19 23:15-23:40 UT Oso Twp. Beach twl ne; 18x50 15b

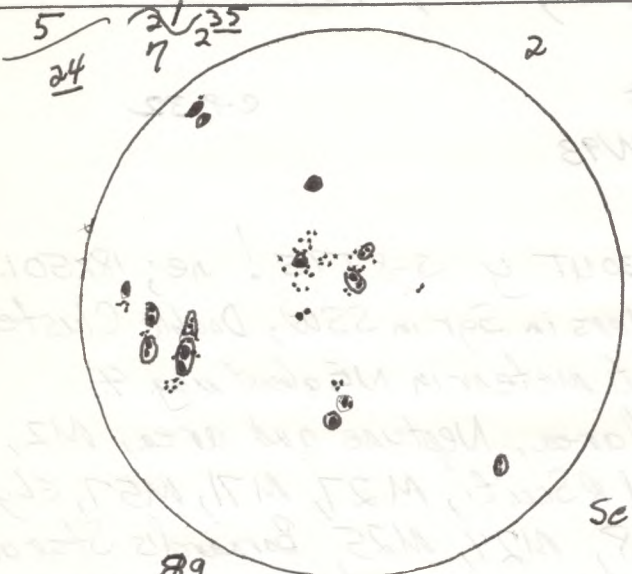
ne: Hoping to see Mercury, the slim crescent moon, and possibly Spica near Mercury, I went to Oso Twp. Beach in Shabot Lake, but clouds prevailed in the west and in much of the



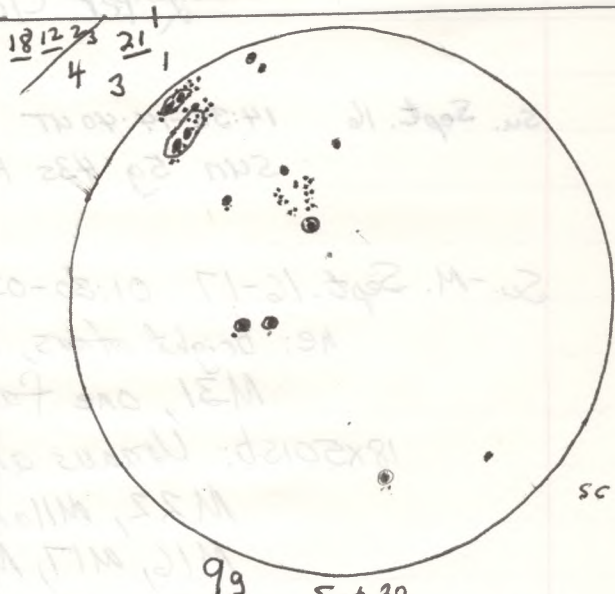
89
605
RSN 140
Sept. 19
15:05-15:20 UT



99
935
RSN 183
Sept 23
18:50-19:10 UT



89
785
RSN 158
Sept. 29
17:30-17:35 UT



99
655
RSN 155
Sept. 30
14:30-14:40 UT

2001.

sky during the half-hour after sunset, which had been at 23:10 UT

18X50 ISB: I scanned the SW sky, and although there were a couple of breaks in the clouds, I did not see the crescent moon or Mercury or the star Spica.

W. Sept. 19 15:15-15:20 UT t

sun 8g 60s RSN 140

C-8, 32
T.O.F.

Su. Sept. 23 18:50-19:10 UT t

sun 9g 93s RSN 183

C-8, 32
T.O.F.

F.-S. Sept. 28-29 03:06-03:11 UT nd s-8(?) T 5-6 (gml) ne

-On a beautifully clear night, but under a very bright gibbous moon, I observed the moon and bright stars including the Summer Triangle in the western sky and bright Capella in the NE.

Sa. Sept. 29 17:30-17:35 UT t

sun 8g 78s RSN 158

C-8, 32
T.O.F.

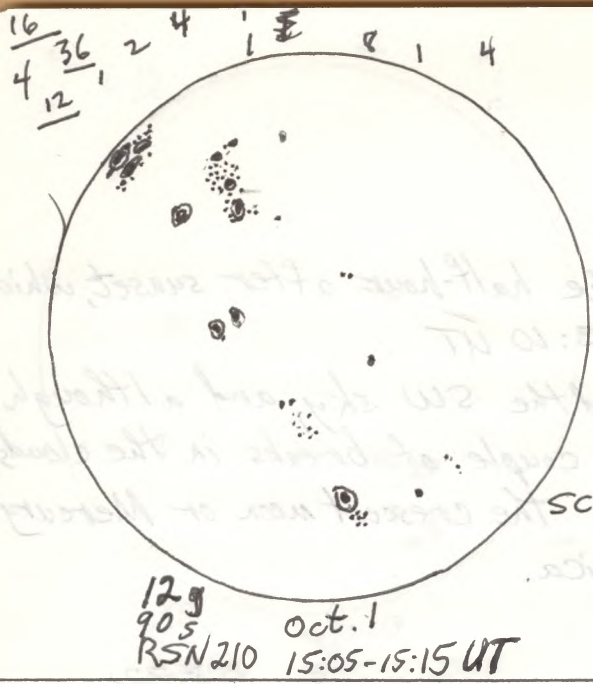
Sa.-Su. Sept. 29-30 00:10-00:15 UT ad twl, gml. ne

-Under very bright gibbous moonlight, I observed the bright stars including the Summer Triangle with Deneb almost in the zenith. Mars was in the SSW, only about $\frac{1}{2}^\circ$ NW of Nuaki (σ Sgr)

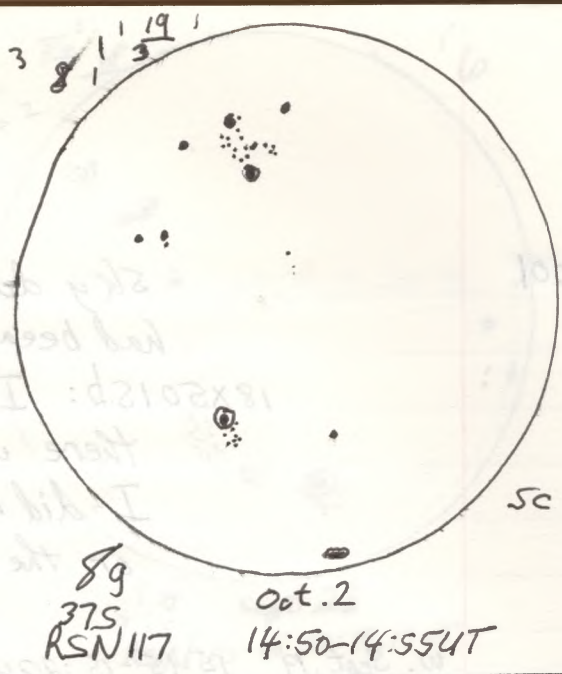
Su. Sept 30 14:30-14:40 UT t

sun 9g 65s RSN 155

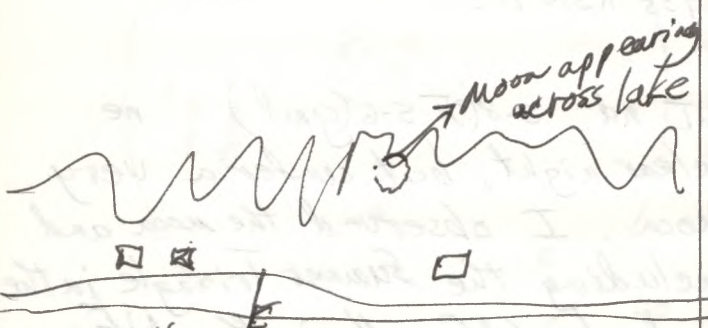
C-8, 32
T.O.F.



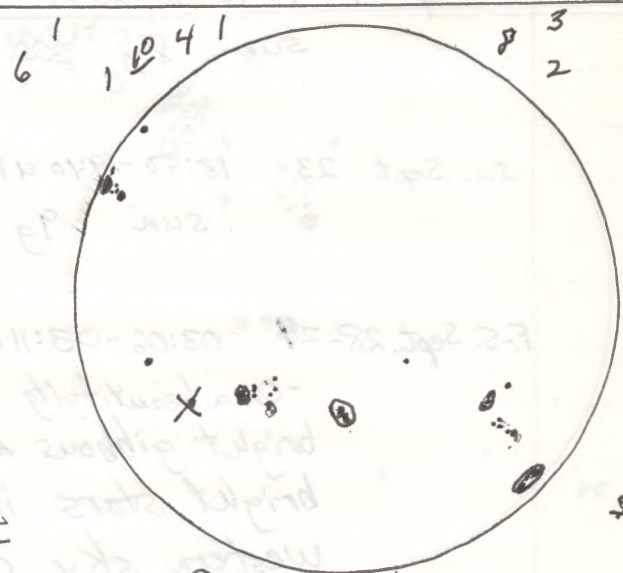
12g
905
RSN 210 Oct. 1
15:05-15:15 UT



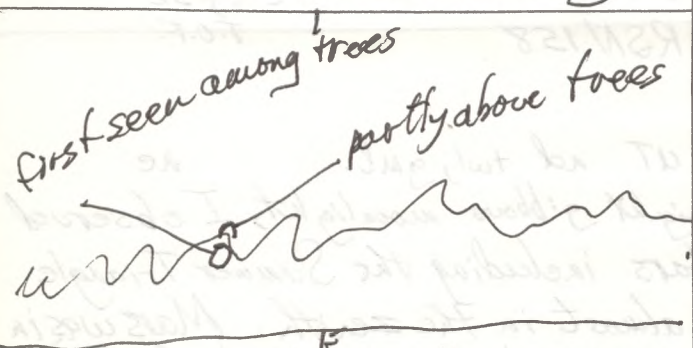
8g
375
RSN 117 Oct. 2
14:50-14:55 UT



Oct. 3-4
23:53 UT Moon appearing amid trees on rising



9g
365
RSN 126 Oct. 4
18:10-18:15 UT



Oct. 4-5
00:15 UT seen among trees
00:47 UT partly above trees
- 2 day old moon seen on rising.

Harvest Moon Rises:

| | Listed Time | First Seen |
|----------|-------------|--|
| Oct. 3-4 | 19:37 EDT | In Trees 19:53 - 16 min. later EDT |
| Oct. 4-5 | 19:59 EDT | 20:15 - 16 min. later EDT |
| Oct. 6-7 | 20:56 EDT | 21:20 - 24 min. later EDT (clouds, hints before) |
| Oct. 7-8 | 21:34 EDT | 21:55 - 21 min. later EDT (clouds, hints before) |

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S.-M. Sept. 30-Oct. 1 02:15-02:20 UT nd very bright gml. ne

- Under a very bright moon I saw the bright stars including the Summer Triangle W. of the zenith and Capella in the NE.

M. Oct. 1 15:05-15:15 UT t C-8,32
sun 12g 90S RSN 210 T.O.F.

Tu. Oct. 2 14:50-14:55 UT t C-8,32
sun 8g 37S RSN 117 T.O.F.

W.-Th. Oct. 3-4 23:50-23:55 UT dock at lake twl ne
- observed the moon 1 day after full appearing through the trees across the lake. (See diagram) It probably appeared at about 23:53 UT, about 16 minutes after listed time of moonrise for the area at about 23:37 UT

Th. Oct. 4 18:10-18:15 UT t C-8,32
sun ~~00~~ 9g 36S RSN 126 T.O.F.

Th.-F. Oct. 4-5 00:10-00:15 UT dock at lake near end, ^{of twl.} ne
- observed moon 2 days after full appearing through the trees across the lake (See diagram) It probably appeared at about 00:15 UT and was first seen partly above the trees at about 00:17 UT

Sa.-Su. Oct. 6-7 01:00-01:30 UT dock, nd, andy just after gmr ne
- Starting about 4 min. after time of moonrise (listed as 00:56) I observed Mars in SW about 3° E. of Nunki,

2001

2:00 PM Oct 30 - Oct 31 02:15-02:30 UT
- Under a very bright moon I saw the bright stars including the Summer Triangle W of the zenith and Capella in the NE.

M. Oct 1 - 12:05-12:15 UT
Sun 12:15 90°
RSM 210

14:50-14:55 UT
Sun 8:0 37°
RSM 117

W-Tri Oct 3 - 23:20-23:25 UT back at lake full moon
- Observed the moon 1 day after full appearing through the trees across the lake. (See diagram) It probably appeared at about 23:20 UT, about 10 minutes after listed time of moonrise for the area at about 23:27 UT.

W-Tri Oct 4 - 23:50-23:55 UT
Sun 23:50 37°
RSM 117

W-Tri Oct 4 - 00:00-00:05 UT back at lake near end of moon
- 2 days after full appearing through the trees across the lake (see diagram) I probably appeared at about 00:00 UT and partly above the trees at about 00:17 UT.

W-Tri Oct 5 - 01:00-01:30 UT back at lake near end of moon
- Starting about 4 min. after time of moonrise (listed as 00:28) I observed moon in SW about 3° E of bank.

2001

β Per 2.1
γ Lyr 3.4
δ Cep 3.8

and bright stars, noting 3 ne. variables: β Per at mag. 2.1, γ Lyr at mag. 3.4 (near its max.), δ Cep at mag. 3.8 (on its way up to max. in about a day)
○ Ceti (Mira) was low in the SE among fairly heavy clouds and could not be seen. Observing on the dock, I saw the light from the moon among the clouds and then I saw the moon itself at 01:20 UT - 24 minutes after the time given as moonrise (at 00:56 UT) There were heavy clouds up about 5° from the horizon and then a break in the clouds that allowed the moon to be seen.

(6:35 - 6:50 pm E.D.T.)

S.-M. Oct. 7-8 22:35-22:50 UT dock at lake twl ne

earth's shadow Beginning about at sunset I observed the earth's shadow rising in the NE and E for about 15 minutes. There was some cloud in the ENE, but the shadow was still quite distinct and easy to see.

(7:30 - 7:35 pm E.D.T.)

- 23:30 - 23:35 UT nd twl ne

ISS

I observed an almost overhead passage of the International Space Station lasting probably over 4 minutes from when it appeared high in the W to when it disappeared in the ENE into the earth's shadow

(9:25 - 10:05 pm E.D.T.)

- 01:25 - 02:05 UT / dock and yard nd / (some) 13x50 / ne; 5x16

ne: From y and nd, I observed the bright stars and

✓ β Per 3.3

(near min.)

✓ γ Lyr - max. 3.3

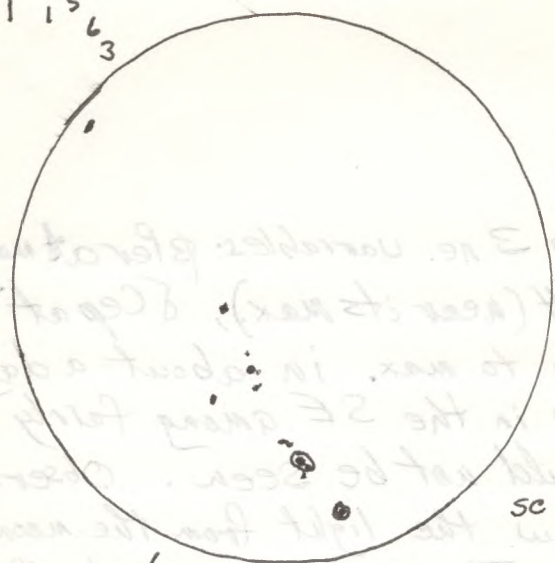
✓ δ Cep - max. 3.5

○ Ceti - ?

3 Variable stars: β Per (Algol) at mag. 3.3 (near min.)
γ Lyr at mag. 3.3 (equal to γ Lyr) (near max.)
δ Cephei at mag. 3.5 (probably right at its max.!). I thought I saw ○ Ceti (Mira) at about mag. 3.5 (?) but there were some clouds low in the SE.

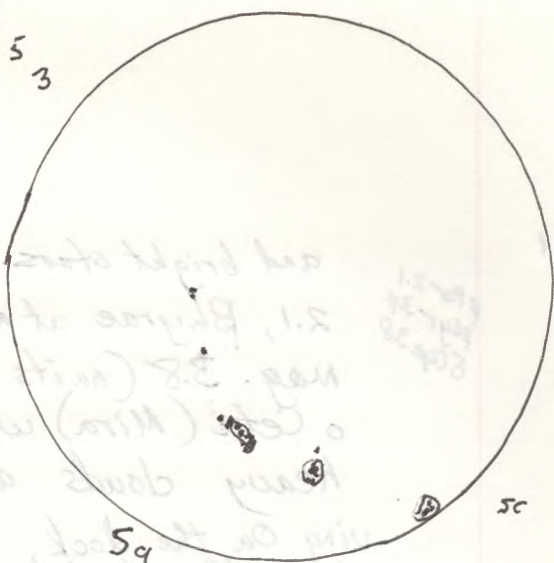
From the dock, I tried to see the moon as soon as

1 1 1 5 6 3



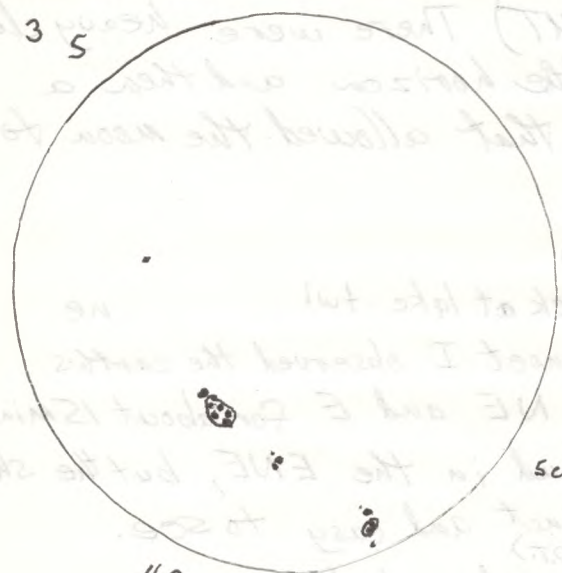
6g
17s
RSN 77
Sept. 8
15:00-15:10 UT

2 1 5 3



5g
18s
RSN 68
Oct. 9
14:50-15:00 UT

1 6 3 5



4g
15s
RSN 55
Oct. 10
14:25-14:30 UT

From the back, I tried to see the moon as seen as
but there were some clouds low in the SE.
thought I saw a Cent (Mir) at about mag 3.2(?)
at mag. 3.2 (probably right at its max!). I
3.3 (equal to 7.3 mag) 3.3 (equal to 7.3 mag)
3.3 (equal to 7.3 mag) 3.3 (equal to 7.3 mag)
I observed the bright star and
01:22-02:02 I took and worked at 7.3 mag/height
01:22-10:02 (mag 3.3)
when it disappeared in the ENE into the center station
4 minutes for the light appeared high in the W to
International Space Station lasting probably over

Oct. 9
0 Cap. mag.
6.9-7.2 mag.
mag. 3.3
1 1 1

2001

possible after moonrise but there were some clouds in the area. Moonrise time was listed as 01:34 UT. (9:34 AM E.D.T.)

Seeing it distinctly was difficult, but I saw it indistinctly at about 01:55 UT (9:55 PM E.D.T.), about 21 minutes after

2 meteors

MOONRISE. 2 bright meteors were seen in the SE at about mag. 0, one at 01:41 UT in the constellation Pisces and one at 01:44 UT in the constellation Cetus

M. Oct. 8 15:00-15:10 UT t.

sun 6g 17s RSN 77

C-8, 32.

T.O.F.

M.-T. Oct. 8-9 01:20-03:25 UT Y 5-8T9 ne; 20x100b; 18x5015b

Aurora?

-ne: bright stars; Mars in SW; glow in N that was possibly Auroral - up about 15°; one or two meteors at about mag. 2; several variable

β Per: 3.4

stars: β Per (Algol) at mag. 3.4; β Lyr at mag.

still near max. β Lyr: 3.4
 δ Cep: 3.8

3.4 - near max.; δ Cep at mag. 3.8; \circ Cet (Mira) at mag. 4.0, Saturn in E.

\circ Cet: 4.0

-20x100b: M15, M2, M33, M31, M32, M110, M13, M92,

12 Messier

M11 and R Scuti area, M57 (The Ring Nebula), M27 (The Dumbell Nebula), M45 (The Pleiades), U and

EU Del, Saturn, β Cyg (Albireo) split, Uranus, Neptune

-18x5015b: M45, Saturn, area near Aldebaran.

T. Oct. 9 14:50-15:00 UT t

sun 5g 18s RSN 68

C-8, 32

T.O.F.

W. Oct. 10 14:25-14:30 UT t

sun 4g 15s RSN 55

C-8, 32

T.O.F.

2001

Sa.-Su. Oct. 13-14 02:00-04:00 UT y 5-7, T7-9 (some haze near end of session) ne; 18x5015b
 ne: bright stars; Saturn in Taurus; several meteors, most about mag. 3. β Per mag 2.4 (max); δ Cep mag 3.9; β Lyr mag 3.4; \circ Ceti (Mira) mag 4.1
 18x5015b: M15, M2, M31, M33, M32, Uranus in Capricornus; Aldebaran and Hyades area, Pleiades and area, Double Cluster,

M. Oct. 15 14:20-14:35 UT t

sun 8g 48s RSN 128

C-8, 32

T.O.F.

M.-T. Oct. 15-16 02:50-04:08 UT y 5-8 T6-8 (some haze and cloud) ne; 18x5015b

ne: bright stars; Saturn in Tau; Mars seen earlier at about 00:35 UT near Teaspoon in Sgr; Variables: \oplus
 18x5015b: Uranus and area, Neptune and area, M31, M32, M40, M33, Double Cluster, M36, M37, M38, M81, M82, Pleiades, Hyades, Saturn, Alcor and Mizar, M57 and ϵ Lyrae.

\oplus Naked-eye variable star estimates: β Per: 2.1; β Lyr: 3.8; δ Cep: 4.3; \circ Ceti: 4.1

Th. Oct. 18 15:50-16:00 UT t

sun 11g 58s RSN 168

C-8, 32

T.O.F.

Th.-F. Oct. 18-19 02:05-02:50 UT y 5-8 T7-8 ne; 18x5015b

ne: bright stars; Saturn in Tau; Mars had been seen earlier in twl.; β Per at mag. 2.1; β Lyr at mag. 3.2; δ Cep at mag. 3.7; \circ Ceti at mag. 4.1
 18x5015b: Uranus, Neptune, M71, M27, NGC 7293 (the Helix Nebula) - large and diffuse; \circ Ceti (Mira); Pleiades; Hyades, Saturn, M36, M37, M38

2001 Sa. Oct. 20 15:00-15:10 UT t
Sun 13g P8S RSN 218

C-8, 32
T.O.F.

Sa.-Su. Oct. 20-21 00:35-00:45 UT y S-8(?) T 4 (poor because of cloud) ne
- Mars in SW, the Summer Triangle stars, other bright stars, but increasing cloud cover interfered with seeing very much

S.-M. Oct. 21-22 03:25-04:35 UT y, nd S-8(?) T 5-8 ^{cloud cover} varying n ne
- observed bright stars and Saturn in Tau and during latter part of session Jupiter in Gemini above the trees in the E. In spite of considerable cloud cover in parts of the sky, I saw a very good Auroral display. It clearly filled over half of the sky with coronal activity in the zenith. For a time there was flaming and pulsation easily visible in the E and NE. Some pink and reddish colouration was evident in the NE and in the NW. Toward the end of the session cloud cover intensified. However, during the session, bright Auroral glow showed through areas of the clouds.

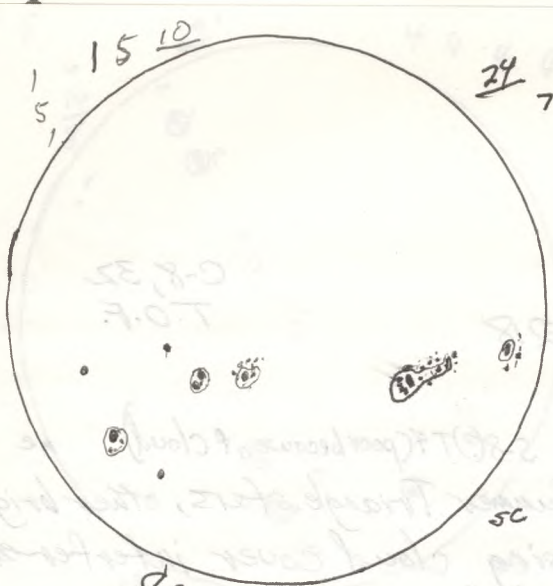
Aurora!

I photographed areas of the Aurora, mainly in the E, and especially in the areas of the constellations Auriga, Taurus, Gemini, Cassiopeia, Perseus.

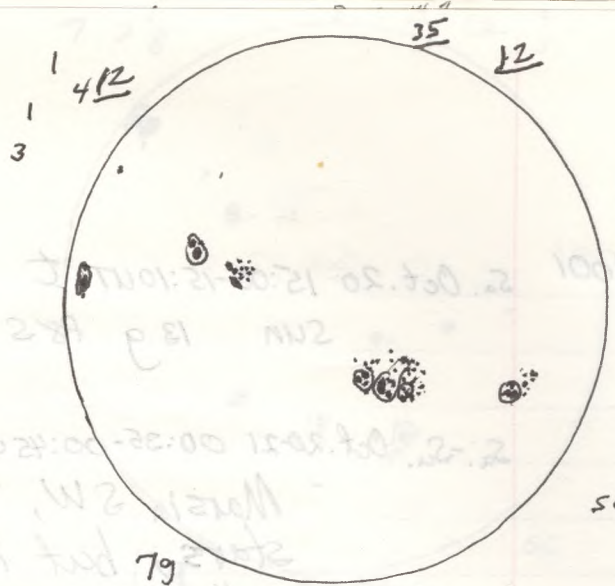
M. Oct. 22 17:15-17:20 UT t
Sun 11g 69 S RSN 179

C-8, 32
T.O.F.

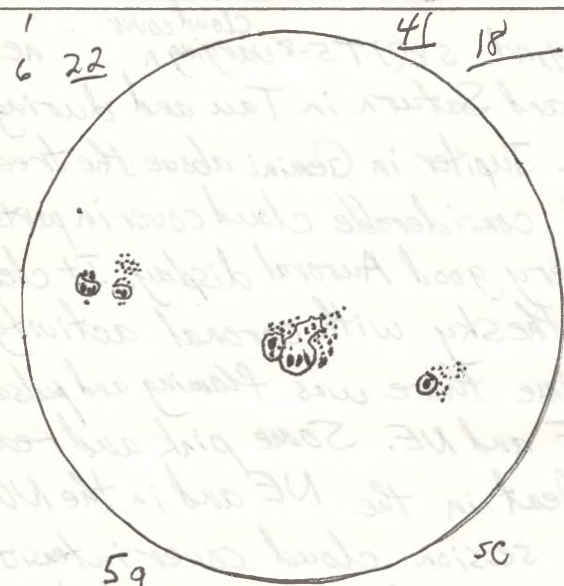
M.-T. Oct. 22-23 03:30-03:40 UT nd S-8(?) T 2-3 (clouds, haze) ne
- stars of Summer Triangle (Mars and Cr. Moon had been seen earlier), Saturn in Tau, some stars of Tau, Per, Aur, Peg, Tri, Ari, UMi, Cep, Cas, Cyg, Lyr, Cet.



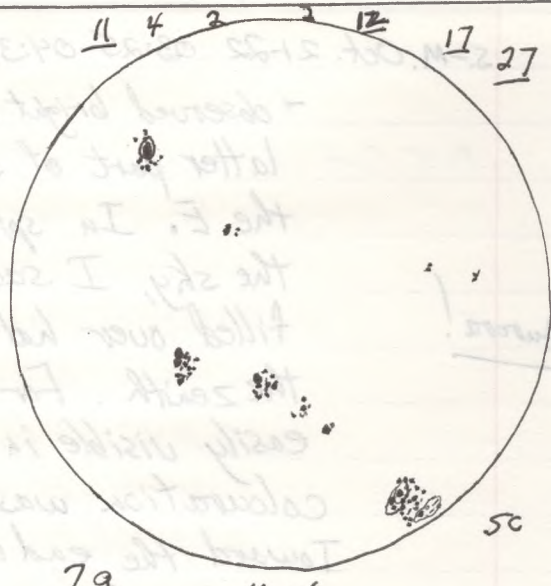
8g
54s
RSN134
Oct. 28
19:05-19:10 UT



7g
68s
RSN138
Oct. 29
16:10-16:15 UT



5g
88s
RSN138
Oct. 30
16:55-17:05 UT



7g
75s
RSN145
Nov. 6
16:25-16:30 UT

2001

Sa-Su. Oct. 27-28 07:10-07:15 in

ne

Aurora From indoors I saw a good Aurora in the N. It seemed to cover most of the N. half of the sky and to be a bit active

Sa. Oct. 28 19:05-19:10 UT t

C-8,32

Sun 8g 54s RSN 134

T.O.F.

M. Oct. 29 16:10-16:15 UT t

C-8,32

Sun 7g 68s RSN 138

T.O.F.

Tu. Oct. 30 16:55-17:05 UT t

C-8,32

Sun 5g 88s RSN 138

T.O.F.

T.-W. Oct. 30-31 23:45-01:20 UT 00^{andy} S-8 T6-7 (fml; some cloud) ne; C-14, 19

ne: bright stars of autumn; bright meteor at 00:58 UT high in NW and just below Vega going downward for about 10° and at mag. 0.

Also, from the dock Saturn and Aldebaran had been seen after rising in E; - very bright, almost full moon

C-14, 19: Mars in SSW, smaller and not as impressive as it would have been a few months ago. This was first light for the C-14 after it had been sent to California to have the mirror re-coated. It took a while to focus the mirror properly. - also observed Elysee.

"first light"
for the
"re-coated"
C-14 mirror

Tu. Nov. 6 16:25-16:30 UT t

C-8,32

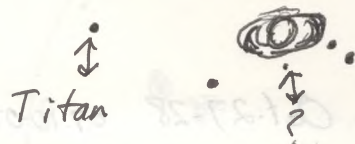
Sun 7g 75s RSN 145

T.O.F.



10g
76s
RSN176
Nov. 7
17:15-17:25UT

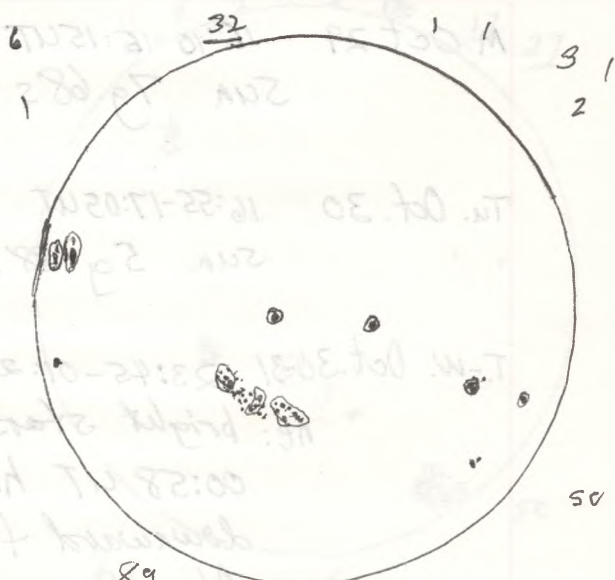
C-14 view of Saturn (Nov. 8)
04:00UT



C-14 view of Jupiter (Nov. 8)
04:10UT



7g
62s
RSN132
Nov. 11
15:20-15:30UT



8g
47s
RSN127
Nov. 12
16:20-16:25UT

Mirror property. - also observed through
It took a while to focus the
sent to California to have the mirror
light for the C-14 after it had been
a few months ago. This was first
as impressive as it would have been
C-14. Mars in 22W, smaller and not
bright almost full moon

"re-coated"
C-14 mirror
"first light"

0-33
T.O.F.

RSN 142
7g 72s
16:25-16:30UT

2001 W. Nov. 7 17:15-17:25 UT t C-8, 32
Sun 10g 765 RSN 176 T.O.F.

W-Th. Nov. 7-8 23:00-23:30 + 00:30-01:30 + 02:30-04:20 UT 00 S-8PT9 C-14, 19, 32
ne; 20x100b; N

ne: bright stars of fall and early winter, Mars, Jupiter, Saturn

20x100b: Mars, Neptune (with these two planets just very slightly more than a binocular field apart ($2\frac{1}{2}^\circ$) in Cap.) Neptune, ~~Mars~~ Saturn and nearby Hyades, Pleiades, Jupiter and 4 moons, M35, M36, M37, M38, T Cor Bor, R Lep, M42, M43, oCet (Mira) and area

C-14, 19, 32: Saturn and at least 4 moons, Jupiter and 4 moons, M36, M31

Photographing: Hyades and Saturn and Orion rising over the trees in the SE.

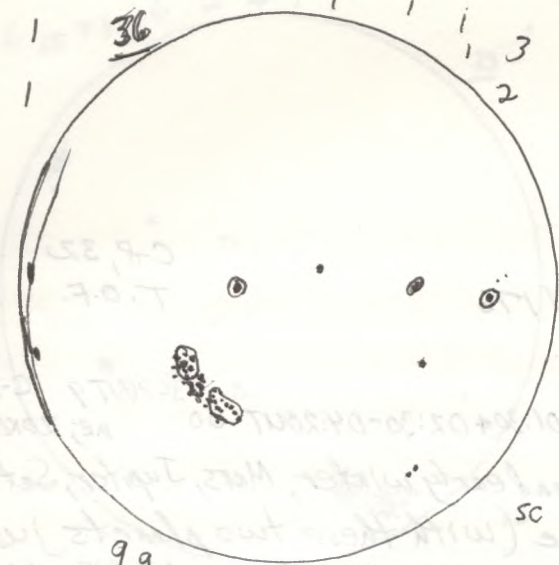
Su. Nov. 11 15:20-15:30 UT t C-8, 32
Sun 7g 625 RSN 132 T.O.F.

S.-M. Nov. 11-12 00:00-01:30 UT y and 00 S-8PT9 ^(clouds clear) until ne; 20x100b

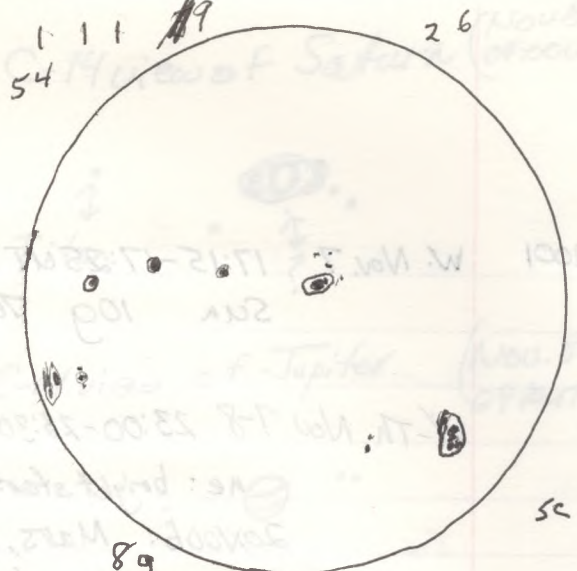
ne: After doing a tour of the Halleford Crater, I hosted some members of the Astronomy I class which had taken place at Algonquin College in Perth. They were Wayne Harris, Norma Thompson and her husband, Carolyn Matheson and Eliza Deary. I pointed out many constellations for them and some bright stars and the 4 variable stars: β Per, δ Cep, β Lyr, and oCet and did rough estimates for δ Cep and oCet.

20x100b: We observed the Pleiades. Then clouds moved in

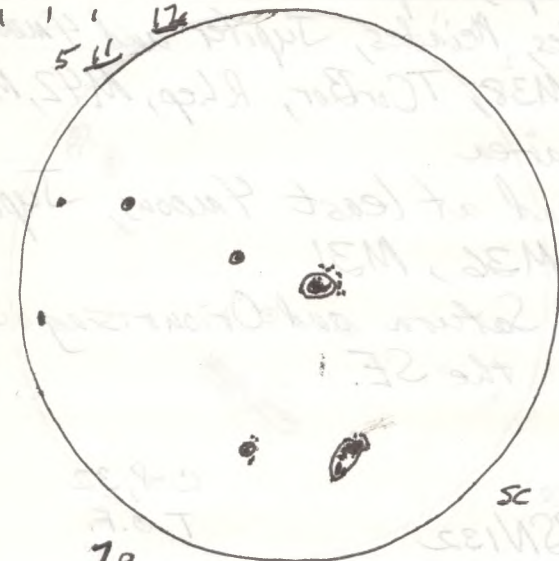
M. Nov. 12 16:20-16:25 UT t C-8, 32
Sun 8g 475 RSN 127 T.O.F.



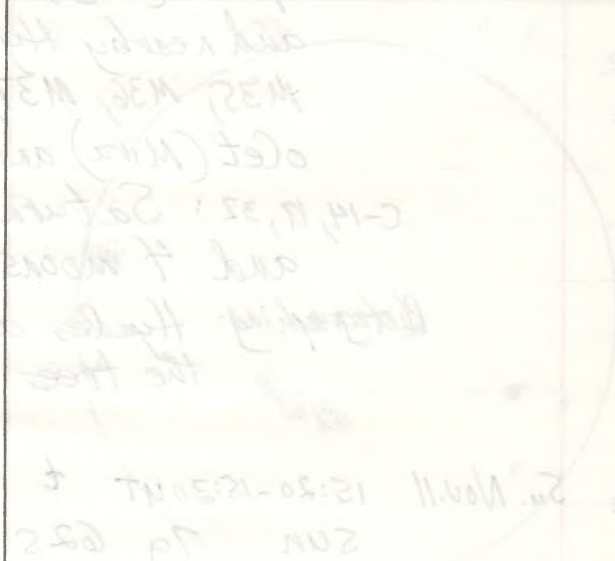
99
47s
RSN137
Nov. 13
17:20-17:25UT



89
29s
RSN109
Nov. 16
16:50-16:55UT



79
32s
RSN102
Nov. 17
15:25-15:30UT



54
1 1 1 15
Nov. 15
15:20-15:25UT

M. Nov. 15 15:20-15:25UT
2000. We observed the stars. Then check marks in
stars: 8 for 8p, 8p, and oct and oct
for them and one bright star and the 4 variable
Mars and Eris Day. I pointed out many constellations
Wynne Hays, Marni Thompson and her husband, Carolyn
later place at Hopkins College in North. They were
some members of the Astronomy Club which had
no: After doing a tour of the Hallett Center, I had

2001

M-T. Nov. 12-13 01:20-02:45 UT y 5-8 T 8.5-9 ne; 20x100b

ne: bright stars, Mars, Jupiter, Saturn.

20x100b: Uranus in Cap. Comet LINEAR (C/2000 WM1) at about mag. 7.0 in Per. just N. of β Per at about R.A. $2^h 45^m$ Dec. 43.4° (see U64.) M15, M35, M36, M37, M38, M42, M43, Pleiades, Hyades, Saturn, Jupiter.

ne Variable estimates: δ Cep: 4.4; β Hy: 3.1; α Cet: 5.0; β Per: 2.1

Tu. Nov. 13 17:20-17:25 UT t

sun 9g 475 RSN 137

C-8,32
T.O.F.

F. Nov. 16 16:50-16:55 UT t

sun 8g 298 RSN 109

C-8,32
T.O.F.

F-S. Nov. 16-17 04:15-04:45 + 05:20-05:40^{UT} y 5-8 T 9 ne; 18x50 15b mag. 3.5

ne: "winter stars", a meteor in Taurus mag. 4, β Per "down" n

18x50 15b: M42, M43, Rosette Nebula area, M35, M36, M37,

comet

M38, Comet LINEAR (C/2000 MW1) at mag. 6.9 in Per

Vesta

E. of β Per., Pleiades, Hyades, Jupiter, Saturn,

R Lep

asteroid Vesta, near θ Tauri (see chart on p.

120 in Sky and Telescope, Nov., 2001.), R Lep - at about mag. 9, M41, Double Cluster, Kemble's Cascade.

ne: ~~β Per was~~

Sa. Nov. 17 15:25-15:30 UT t

sun 7g 325 RSN 102

C-8,32
T.O.F.

Sa-Su. Nov. 17-18 02:40-03:15 UT and 03:40-04:00 UT y 5-8 T 9 ne; 18x50 15b

ne: stars of winter, Jupiter, Saturn

R Lep - 9
Comet LINEAR

18x50 15b: R Lep at mag. 9, M42, M43, Comet LINEAR (C/2000 MW1)

2001.

Vesta at about mag. 7.0 and near β Per, Vesta near θ Tauri in
5 Sep - 4.4! Hyades, Cephei down to mag. 4.4 (surprisingly
6 Oct - 5.1 faint!) 6 Oct down to about 5.1.
(4:30 - 6:00 a.m. E.S.T.)
09:30 - 11:00 y S-8 T 9-9.5! ne

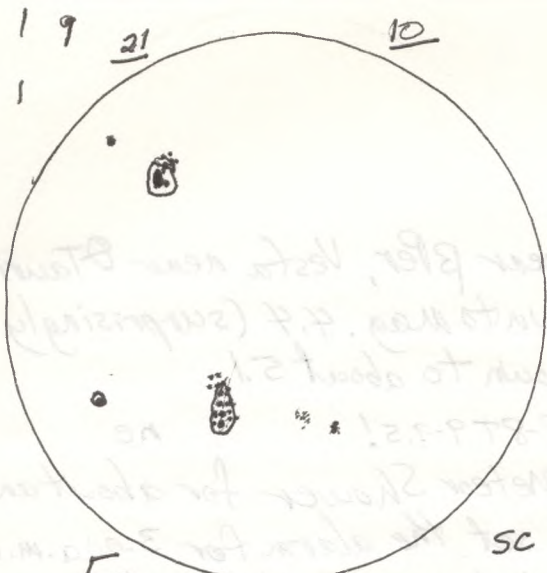
Z.L.

Great
Leonid
Meteor
Shower
(or
Meteor
Storm!)

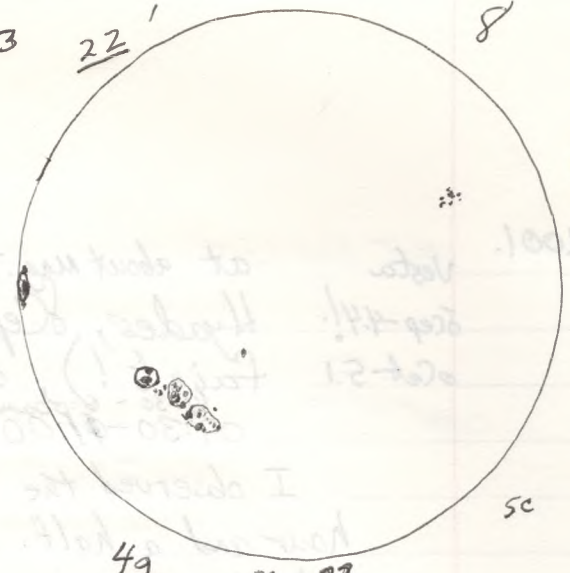
I observed the Leonid Meteor Shower for about an hour and a half. I had set the alarm for 3:00 a.m. E.S.T. and when I woke up and looked at the clock, it was 4:21 a.m. E.S.T. I had not heard the alarm. I started observing at about 09:30 UT (4:30 a.m. E.S.T.). The sky was magnificently clear. The Zodiacal Light was very bright and up into the constellation Leo. The Shower was very strong with many, many very bright meteors many leaving short trains and in all parts of the sky but particularly concentrated, it seemed in Gemini and Cancer, about 30° to 50° west of the constellation Leo. The meteors seemed to come in bunches, with one often followed by another one or two, half a second later. Often there were two almost simultaneously in different parts of the sky. My 15-minute counts were as follows:

| | |
|--|--------------|
| 9:45 - 10:00 UT (4:45 - 5:00 a.m. E.S.T.) | : 70 |
| 10:00 - 10:15 UT (5:00 - 5:15 a.m. E.S.T.) | : 64 |
| 10:15 - 10:30 UT (5:15 - 5:30 a.m. E.S.T.) | : 93 |
| 10:30 - 10:45 UT (5:30 - 5:45 a.m. E.S.T.) | : <u>101</u> |
| Total: | 328 |

I also saw two that were not Leonids and during the 15 minutes both before and after I did the count, I saw a good number. The numbers were probably increasing about the time that Astronomical Twilight began at 10:25 UT (5:25 a.m. E.S.T.). During the observing session, the brightness of

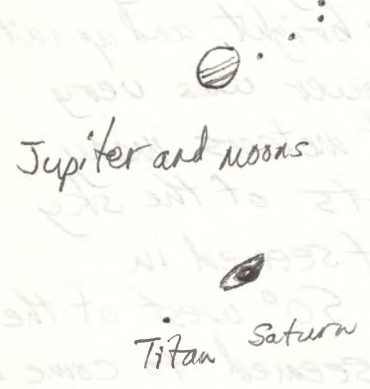


59
425
RSN 92
Nov. 20
15:30-15:35UT



49
345
RSN 74
Nov. 23
18:40-18:45UT

F.-S. Nov. 23-24, 4:00 UT



Jupiter and moons

Titan Saturn

Views in Ast, 8mm at 55.6X

10:30-10:45 UT (230-245 am EST)
10:15-10:30 UT (215-230 am EST)
10:00-10:15 UT (200-215 am EST)
9:45-10:00 UT (185-200 am EST)
9:30-9:45 UT (170-185 am EST)
Total: 328

I also saw two that were not counted and during the 15 minutes both before and after I did the count. I saw a good number. The numbers were probably increasing about the time that astronomical twilight began at 10:25UT (2:25am EST). During the observing session, the brightness of

2001

Jupiter at mag. -2.6 seemed to be a distraction. The brightest of the meteors were about mag. -3 and left trains for 3 or 4 seconds. It was definitely one of the very best meteor showers I had ever seen.

Tu. Nov. 20 15:30-15:35 UT t C-8, 32
Sun 5g 42s RSN 92 T.O.F.

F. Nov. 23 18:40-18:45 UT t C-8, 32
Sun 4g 34s RSN 74 T.O.F.

F.-S. Nov. 23-24 03:50-04:30 UT y, t 5-8(?) T 5-7 (some cirrus; N) ne; AST, 15.5^{gml.}, 18x50 ISb
ne: Jupiter, Saturn, "winter stars", gibbous moon in W.
AST, 15.5, 8: Pleiades, Hyades, M42, Jupiter and Galilean moons, Saturn and Titan (See diagrams.)
18x50 ISb: M42, M43, M35, M36, M37, M38, Jupiter and 4 moons, Saturn, Double Cluster, Kemble's Cascade.
(2:25-2:40 a.m. EST)
07:25-07:40 UT in ne

Aurora!
From indoors, I observed a wide-spread Auroral display in the Northern sky. The display was seen from NW to NE with hints of yellow and perhaps green in the NW and a large area of reddish Aurora in the NNE and NE. There was some slight pulsation or "flaming". It appeared from about 5° above the horizon up to more than 50° above the horizon.

M.-T. Dec. 3-4 03:20-03:30 UT 5-8(?) T 5 (gml.!) ne
with a very bright gibbous moon in Gemini, below Jupiter, I observed them and Saturn in Taurus and the bright stars of early winter.

2001 W.-Th. Dec. 5-6 02:10-02:35 UT y 5-8(?) T8.5-3 (clouds moved in) ne; 7x35b

Comet
LINEAR

ne: Jupiter and Saturn, stars of fall and winter
7x35b: Comet LINEAR (C/2000 MW₁) in Cetus at about
R.A.: $0^h 52^m$, Dec.: -12.5 (See U262). (It was
predicted to be at mag. 5.1 to 5.0, but I was
not sure of seeing it naked-eye.) M35, M36,
M37, M38, Double Cluster, Kemble's Cascade, Jupiter,
Saturn, Hyades, α Ceti (Mira) - below naked-eye
visibility at about mag. 6.5 to 7, M42 in Orion.

Th.-F. Dec. 6-7 00:00-01:30 UT and 02:00-04:00 UT y 5-8(?) T9.5(!) ne; 18x5015b; \wedge 20x100b

ne: Mars in Aquarius, Saturn in Taurus, Jupiter in Gemini;
stars of winter; 2 meteors, one of which might have been a
Geminid, both being about mag. 3.

18x5015b: Uranus in Cap., M42, M43, M35, M36, M37, M38,
Kemble's Cascade, Pleiades, Hyades, Jupiter, Saturn,
area of
 \wedge Vesta in Taurus, Comet LINEAR (C/2000 MW₁) in
Cetus near the star Diphda, M31, M32, M110, M33,

~~Vesta~~

20x100b: M42, M43, NGC 1981, NGC 1973, Jupiter, Saturn,
Vesta in Taurus, α Eri, β Eri, α Lep, β Lep,
RR Lep (See U269 and U270), κ Ori and
VV Ori (See U225), Comet LINEAR (C/2000 MW₁)

Vesta

Comet
LINEAR

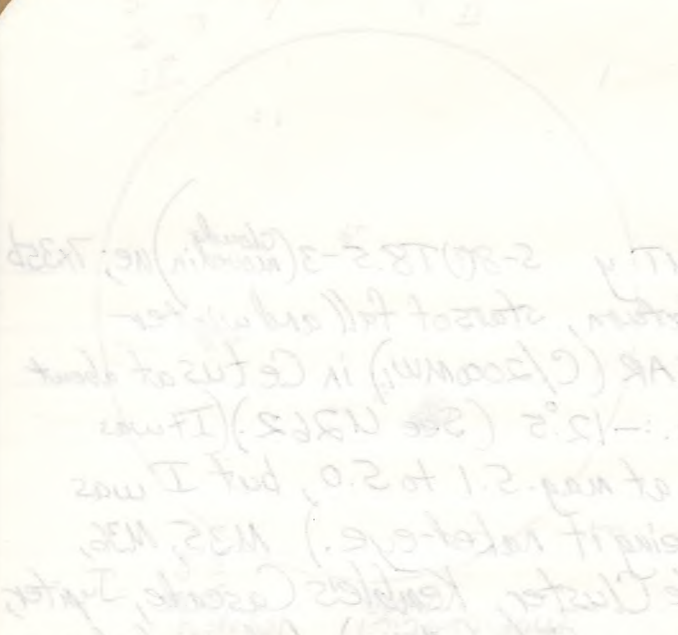
with a tail that was easily seen in the
binoculars and extended for about 2° . It was
expected to be about mag. 5.1 to mag. 5.0. However,
I did not knowingly see it with the
unaided eye. M41, NGC 2244

Variable Estimates: α Ceti: mag. 6.0; δ Cep: mag. 4.1

F. Dec. 7 17:20-17:30 UT t

sun 8g 51S RSN 131

C-8, 32



2-28(18.2-3) (Mars) (Mars) (Mars)
 DE: Jupiter and Saturn start of fall and winter
 TR35B: Comet LINEAR (C/2000W1) in Cetus at about
 R.A. 0° 52', Dec. -12.5 (see U222). It was
 predicted to be at mag. 2.1 to 2.0, but I was
 not sure of seeing it naked-eye. M32, M33,
 M37, M38, Double Cluster (NGC 884, NGC 885) in
 Perseus (M31, M32, M33) in Andromeda

visibility at about mag. 6.5 to 7, M42 in Orion.
 Th. F. Dec. 6-7 00:00-01:30 UT and 02:00-03:30 UT
 ne: Mars in Aquarius, Saturn in Taurus, Jupiter in Gemini;
 stars of winter; 2 meteor, one of which might have been
 Gemini, both being about mag. 3.
 RR rep: Uranus in Cap, M42, M43, M32, M33, M37, M38,
 Ringed Cascade, Pleiades, Hyades, Jupiter, Saturn
 VV Orionis (see U222), Comet LINEAR (C/2000W1) in
 Cetus near the star Diphda, M31, M32, M110, M33
 20000: M42, M43, NGC 1861, NGC 1713, Jupiter, Saturn,
 Vesta in Taurus, 6 Cy, 6 Vir, 6 Leo, 6 Cap, 6 Sag

RR rep (see U222 and U270), CRONOS and
 VV Orionis (see U222), Comet LINEAR (C/2000W1)
 with a tail that was easily seen in the
 proscopium and extended for about 2°. It was
 expected to be about mag. 2.1 to mag. 2.0. However
 I did not knowingly see it with the
 unaided eye. M41, NGC 2294
 Variable estimates: 0.6: mag. 6.0; 6.0: mag. 4.1

C-8, 32
 RSN 131
 8 p

3001 W-Th Dec 2-6 02:10-03:30 UT
 DE: Jupiter and Saturn start of fall and winter
 TR35B: Comet LINEAR (C/2000W1) in Cetus at about
 R.A. 0° 52', Dec. -12.5 (see U222). It was
 predicted to be at mag. 2.1 to 2.0, but I was
 not sure of seeing it naked-eye. M32, M33,
 M37, M38, Double Cluster (NGC 884, NGC 885) in
 Perseus (M31, M32, M33) in Andromeda

visibility at about mag. 6.5 to 7, M42 in Orion.
 Th. F. Dec. 6-7 00:00-01:30 UT and 02:00-03:30 UT
 ne: Mars in Aquarius, Saturn in Taurus, Jupiter in Gemini;
 stars of winter; 2 meteor, one of which might have been
 Gemini, both being about mag. 3.
 RR rep: Uranus in Cap, M42, M43, M32, M33, M37, M38,
 Ringed Cascade, Pleiades, Hyades, Jupiter, Saturn
 VV Orionis (see U222), Comet LINEAR (C/2000W1) in
 Cetus near the star Diphda, M31, M32, M110, M33
 20000: M42, M43, NGC 1861, NGC 1713, Jupiter, Saturn,
 Vesta in Taurus, 6 Cy, 6 Vir, 6 Leo, 6 Cap, 6 Sag

RR rep (see U222 and U270), CRONOS and
 VV Orionis (see U222), Comet LINEAR (C/2000W1)
 with a tail that was easily seen in the
 proscopium and extended for about 2°. It was
 expected to be about mag. 2.1 to mag. 2.0. However
 I did not knowingly see it with the
 unaided eye. M41, NGC 2294
 Variable estimates: 0.6: mag. 6.0; 6.0: mag. 4.1

F. Dec. 7 17:30-17:30 UT
 Sun 8 p

Comet
 LINEAR

Vesta

Comet
 LINEAR

2001.

F.-S. Dec. 7-8 22:30-22:40 UT 00 twl ne; 20x100b

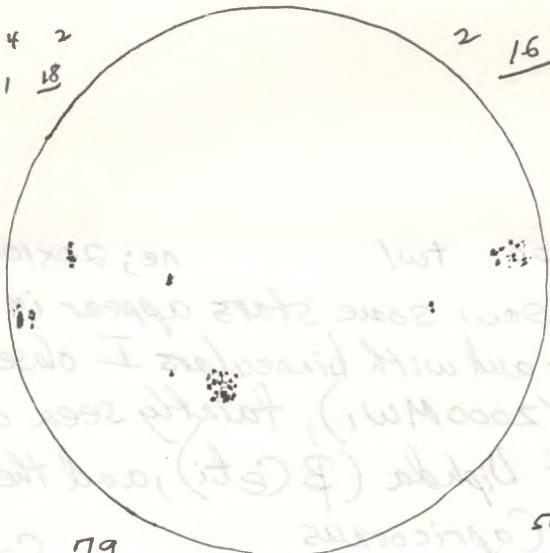
During twilight I saw some stars appear in a very transparent sky and with binoculars I observed Comet LINEAR (C/2000 MW₁), faintly seen about $2\frac{1}{2}$ degrees WSW of Diphda (β Ceti), and the planet Uranus in Capricornus

00:45 - 03:45 UT 00 S-8-9 T 9.5! ne; 20x100b, ^{C-14, 19, 53} \wedge
 ne: With some members of the Astronomy II class from Algoquin College (Brian Mac Cormick, Carolyn Matheson, Norma Thompson and her husband), I had dinner at Grandma's Country Kitchen Restaurant in Shearbot Lake and started to observe in the observatory whose roof I had opened before going to the restaurant. I reviewed some of the constellations for the students. The winter constellations were spectacular under the very transparent conditions, especially after the neighbour's outdoor lights went off (since the lights were on a timer and the neighbours were away.) Mars, Saturn, and Jupiter were the bright planets visible. There were several bright meteors seen by the group. We tried to estimate the mag. of δ Cep. 20x100b. the bright comet, Comet LINEAR, which was at about mag. 6.0 or possibly brighter, but not seen naked-eye, about $2\frac{1}{2}$ degrees WSW from Diphda (β Ceti). A tail about 2 degrees long could be seen faintly. - M42, M43, NGC 1981, NGC 1973 (in Orion's Sword), CK Orionis, VV Orionis (near E Orionis in Orion's Belt), NGC 2244 (and saw part of the Rosette Nebula, with some difficulty), M35, M36, M37, M38, R Lep, ^{SMon and sea} \wedge Kemble's Cascade in Camelopardalis, area of the asteroid

Comet
LINEAR

6 4 2
1 18

2 16



79
495
RSN/119

Dec 9
17:15-17:20 UT

50

5001

F-2 Dec-7-8 22:30-22:40 UT

From Algorithm College (Brian Mac Cormick, Carolyn Matheson, Norma Thompson and her husband) I had dinner at Grandma's Country Kitchen restaurant in Shattuck Lake and started to observe in the observatory whose roof I had opened before going to the restaurant. I reviewed some of the constellations for the students. The winter constellations were spot-on with the very transparent conditions, especially after the neighbours outdoor lights went off (since the lights were on a timer and the neighbours were away). Mrs, 2 hour, and 1 hour were the bright planets visible. There were several bright

meteors seen by the group. We tried to estimate the magnitude of 6000. The bright comet, Comet LINEAR, which was at about mag 6.0 or possibly brighter, but not seen with the naked eye, about 2 degrees WSW from Dipole (B. G. et al). A tail about 2 degrees long could be seen faintly. - M42, CK Orion, W Orion 2 (near E Orion in Orion's belt) and some part of the Kappa Aurigae with some difficulty. M32, M31, M37, M38, R 130, and some of the stars in Camelopardalis. Area of the sky

Comet LINEAR

2001

Vesta near the Hyades (but not absolutely sure of which object was Vesta), Pleiades, α Ceti (Mira), M41.
C-14: With the 19mm ocular, we observed Saturn and 3 moons and Jupiter and 3 moons - Io, Ganymede, and Europa (in order from the planet but Callisto was not in the field, being "further out" as a view with the 20x100 binoculars later showed). With the 55mm ocular, we observed M31 and M110. The students were very impressed with the views of Saturn and Jupiter.

Su. Dec. 9 17:15-17:20 UT t

@-8, 32

sun 7g 495 RSN 119

Sa.-M. Dec. 9-10 03:25-04:05 UT y S-8 T 9

ne; 18x50 ISB
^{EGep and 5 GP}

ne: Jupiter, Saturn, winter stars; estimated δ Cep fainter than
18x50 ISB: searched for Comet LINEAR in SW below and to the right from the star Diphda (β Ceti) but did not see it since it was probably lower among the trees. - M35, M36, M37, M38, M32, M43, NGC 1973 and NGC 1981, R Lep - faint at about mag. 9.2, area of RX Eri, R Eri, RX Lep, RR Lep, CK Orionis, VV Orionis, Kemble's Cascade, Double Cluster, Jupiter and 4 moons, Saturn, area of Vesta near Hyades.

Th.-F. Dec. 13-14 03:00-03:50 UT FL: 1a S-8(T) 6 ne; 10x50b; 12 1/2"

ne: Jupiter, Saturn, bright winter stars though light pollution was a problem

10x50b: searched for Comet LINEAR (C/2000 MW1) but did not see it with any certainty -

Vestra near the Hyades but not absolutely sure of
 which object was Vestra, Pleiades, or (M11), M11.
 C-14: with the 19mm ocular, we observed Saturn
 and Uranus and Jupiter and Mars-I, and
 Ganymede, and Europa (in order from the planet
 but Callisto was not in the field being followed.
 as a view with the 200mm binoculars later
 (found) with the 25mm, which the observer

M31 and M10. The students were very
 impressed with the views of Saturn and
 Jupiter.

08, 33

KSN 119

2. Dec 9 17:15-17:20 UT
 SUN 79 492

M3, M4, M5, NGC 193 and NGC 194
 R Lep - faint at about mag. 9.2, area of R Lep,
 R Eri, R Lep, CK Orionis, VV Orionis,
 Kessler's Cluster, Double Cluster, Jupiter and
 4 moons, Saturn, area of Vega near Hyades

M3, M4, M5, NGC 193 and NGC 194
 R Lep - faint at about mag. 9.2, area of R Lep,
 R Eri, R Lep, CK Orionis, VV Orionis,
 Kessler's Cluster, Double Cluster, Jupiter and
 4 moons, Saturn, area of Vega near Hyades

Tr-F Dec 13-14 03:00-03:20 UT FL: la 2-RTT E no; lossob: 15.5"
 no: Jupiter, Saturn, bright winter stars though
 light pollution was a problem
 lossob: searched for Comet LINEAR (C/2000 MM1)
 but did not see it with any certainty -

Tr-F Dec 13-14 03:00-03:20 UT FL: la 2-RTT E no; lossob: 15.5"
 no: Jupiter, Saturn, bright winter stars though
 light pollution was a problem
 lossob: searched for Comet LINEAR (C/2000 MM1)
 but did not see it with any certainty -

2001.

looked mainly in area of the sky SW of Diphda^γ
(β Ceti) in the SW. There seemed to be
some cloud in that area of the sky in addition
to the light pollution.

12½": Jupiter. Denise experienced some problems(s)
with the telescope. She also looked ~~for~~ at
Saturn, and looked for the Comet.

03:50 - 05:55 UT FL: by S-8(?) TT-8 (light pollution) ^{10x50b} ne; n

ne: Jupiter, Saturn, bright stars including
Canopus in SE, about 30 or perhaps 40

members of the Geminid Meteor Shower, which
was to have peaked at 04h UT. Many of them
were quite bright. I did not keep a precise
count. Denise observed for about 10 minutes.

It was certainly not comparable to the great
Leonid Meteor Shower 26 days earlier, although
there were some bright ones (0 to -2 mag.) and even
a few very bright ones (one was about -4
mag.)

10x50b: Orion Nebula and area, Jupiter.

F. Dec. 14 19:10 - 20:30 UT FL: pl ne c. #14 welder's glass

With a ~~great~~ deal of scattered cloud in the
area, I went to the pool at the clubhouse to
observe a partial solar eclipse. It was seen as
partial in most of North America, but the path of
annularity crossed part of the Pacific Ocean and
parts of Nicaragua and Costa Rica. The listed times
for First Contact in Miami and Tampa were 19:14 UT
and 19:12 UT respectively. Observing with #14
arc welder's glass, I first noticed a very tiny "bite"

Geminid
Meteor
Shower
Peak
(30-40 meteors)

Partial
Solar
Eclipse

looked mainly in area of the sky SW of Diphid (Betel) in the SW. There seemed to be some cloud in that area of the sky in addition to the light pollution.
 12 1/2" Jupiter. Denise experienced some problems with the telescope. She also looked for Saturn, and looked for the Comet.
 13:20-05:25 UT. Flyby 2897 T-R (light pollution) 10x50

10x50: Orion Nebula and area, Jupiter, mag.
 a few very bright ones (one was about -4 there were some brighter ones (0 to -2 mag) and even found Meteor Shower 32 days earlier although it was certainly not comparable to the great count. Denise observed for about 10 minutes. were quite bright. I did not keep a precise was to have looked at 04h UT. Many other members of the Gemini Meteor Shower, which Caprus is 2E, about 30 or perhaps 40 ne: Jupiter, Saturn, bright stars including

(30+ meteors)
 Peak
 Shower
 Meteor
 Count

are we left plus I first noticed a very tiny "dot" and 19:12 UT respectively. Observing with 14" for First Contact in Miami and Tampa were 19:14 UT part of Mexico and Central America. The last time aurorally crossed part of the Pacific Ocean and partial in west of North America, but the part of observe a partial solar eclipse. It was seen as area, I went to the pool at the clubhouse to With a great deal of scattered cloud in the 19:10-20:30 UT Flyby ne C#14 wellington

Partial
 Solar
 Eclipse

2001

out of the solar disk at about 19:15 or 19:16 UT. It was at about "the 5 o'clock position" on the solar disk I observed at intervals of a few minutes and shared the welder's glass with several people who were at the pool. Fairly "heavy" clouds in the west created a problem with viewing after 20:00 UT (5:00 pm EST). I waited for a while and a few of us had a look at at least part of the solar disk among the clouds at about 20:20 UT (5:20 pm EST), but still there was a great deal of cloud in the western sky. I walked to the area of the entrance to the development and to the area in front of the clubhouse, but did not find the view to the horizon area particularly good. I then walked past the area of the tennis courts, still keeping an eye on the area of the clouds to the west where the sun was about to set or was setting, but I did not get a further chance at that time to view the setting sun because of the clouds or the trees and other things obstructing the view to the west. Overall, I had several good views of the partial eclipse prior to mid-eclipse (which was at about 20:22 UT (5:22 pm EST)), in spite of the clouds.

F.-S. Dec. 14-15 02:10-03:40 UT FL: by S-S(?) T7 (some cloud) ^{and light pollution} NE

2 possible
Geminids

I observed the E and SE sky hoping to see some Geminid Meteors. I saw Jupiter, Saturn, and the "winter stars of the SE sky" including Canopus and also Regulus rising. I saw two meteors, one of which was probably a Geminid and one of which might have been a Geminid.

out of the solar disk at about 19:15 or 19:16 UT. It was at about "the 2 o'clock position" on the solar disk I observed at intervals of a few minutes and shared the water glass with several people who were at the pool. Fairly heavy clouds in the west created a problem with viewing after sunset (approx. 19:20 UT). I waited for a while and then as we had a look at the sunset but during the clouds of

about 20:20 UT (approx. E.S.T.) but still there was a great deal of cloud in the western sky. I walked to the area of the entrance to the development and to the area in front of the clubhouse, but did not find the view to the horizon or a particularly good. I then walked past the area of the tennis courts still keeping an eye on the area of the clouds to the west where the sun was about to set or was setting, but I did not get a further chance at that time to view the setting sun because of the clouds of the trees and other things obstructing the view to the west. Over all I had several good views

of the partial eclipse prior to mid-eclipse (which was at about 20:22 UT (2:22 P.M. EST.) in part of the clouds.

F-2 Dec. 14:15 02:10-03:40 UT FL: by 28017 (Gardner) NE
I observed the 2 and 3 E stars appearing to see some Gemini Meteors. I saw Jupiter, Saturn, and the 2 E stars of the SE sky including Castor and also Regulus rising. I saw two meteors, one of which was probably a Gemini and one of which might have been a possible Gemini.

2001

Su.-M. Dec. 16-17 00:20-00:40 UT FL: la and by S-8T7 10x25b
ne; 10x50b; n

ne: Jupiter, Saturn, Mars, bright winter stars.

10x50b: searched for Comet LINEAR (C/2000 MW1) in the SE sky. After consulting the skyPub. website to get the current month's ephemeris of the comet, I knew we should be looking a few degrees SSE from Fomalhaut (α Piscis Austrinae). I looked repeatedly but failed to be sure of seeing it.

10x25b: With the small 10x25 binoculars, we also searched the area, but could not be sure of seeing the comet.

M.-T. Dec. 17-18 00:40-01:00 UT FL: by S(8?)T6 ^{some cloud} (light pollution) 10x50b
ne; 10x25b; n

ne: winter "eastern sky" constellations, Mars, Jupiter, Saturn, Achernar in SE.

10x25b: area of sky SE of Fomalhaut, hoping to see Comet LINEAR (C/2000 MW1) but was not sure of seeing it.

10x50b: Mars, Jupiter, Saturn, Pleiades, Hyades, Orion's Belt and Sword area, areas of the SE sky roughly between Fomalhaut and Achernar, hoping to see Comet LINEAR (C/2000 MW1) but was not sure of seeing it.

T.-W Dec. 18-19 01:15-02:45 UT FL: by S-8T6-7 (light pollution) ne; 10x50b

ne: Mars, Jupiter, Saturn, stars of winter

10x50b: Mars, Jupiter, Saturn, M42 and area, Pleiades, Hyades, areas of Auriga, Lepus, Orion, Canis Major, searched for Comet LINEAR (C/2000 MW1) in area of β Sculptoris since the position for the comet (for 0^h UT Nov. 19: R.A. 23^h22.3^m Dec.: -41°28') put it approximately S. of

24-M. Dec 17 00:30-00:45: out FL: hardly 2-17
 re: Jupiter, Saturn, Mars, bright water stars.
 10x50: searched for Const L IREAR (C3000 MW)
 in the SE sky. After consulting the sky atlas
 website to get the current month's positions
 of the const. I know we should be looking
 a few degrees SSE from Fornalut (x
 for A. I looked repeatedly.

but failed to be sure of seeing it.
 10x50: With the small 10x25 binoculars we also
 searched the area, but could not be
 sure of seeing the const.

11: winter "constellation" Mars, Jupiter
 Saturn, A. later in SE.
 10x50: area of sky SE of Fornalut, tried to see
 Const L IREAR (C3000 MW) but was unsure of seeing it.
 10x50: Mars, Jupiter, Saturn, Uranus, Neptune, Pluto
 But did not see any stars in the SE sky.

roughly between Fornalut and A. later in SE
 to see Const L IREAR (C3000 MW) but was
 not sure of seeing it.

T-W Dec 18-19 01:00-01:15: FL: 2-17 (hardly) re: 10x50
 re: Mars, Jupiter, Saturn, Uranus, Neptune, Pluto
 10x50: Mars, Jupiter, Saturn, Uranus, Neptune, Pluto
 area of A. later in SE, searched
 for Const L IREAR (C3000 MW) in area of 8x25 binoculars
 since the position for the const (for 0 UT Nov 19:
 R.A. 22^h 53^m 2^s Dec: -41° 28') but it approximately 2.0°

2001

that star. I also scanned the general area between Achernar (α Eridani) and Fomalhaut (α Piscis Austrini). The light pollution in the S. sky was probably the main reason for not seeing the comet. There were also searchlights directed into that part of the sky.

Th.-F. Dec. 20-21 03:15-03:20 UT FL: by S-8 T7 (cm) light pollution ne
-winter constellations in E., Jupiter in Gem., Saturn in Tau., Canopus in SE. Mars and crescent moon had been seen earlier.

Th.-F. Dec. 27-28 (3:54-3:56 am EST)
08:54-08:56 UT FL: in garage S-8(?) T5 (clouds) ne
Hoping to see the beginning of the lunar occultation of Saturn, I opened the garage door and saw the moon and Jupiter and Sirius in the western part of the sky. I did not notice Saturn which was presumably very close to the moon, but the moon was dimmed by clouds and a huge mass of very thick clouds were moving in from the W. They were about to cover the moon and they did so within a couple of minutes or so. That ~~ended~~ any chance of seeing the disappearance of Saturn as the moon occulted it. According to prediction, the disappearance was to be at about 09:00 UT (5:00 a.m. E.S.T.). The moon was about 15° to 20° above the westerly horizon.

Saturn occultation missed because of clouds.

Sa.-Su. Dec. 29-30 (5:05-6:15 am EST)
10:05-11:15 UT FL: garage S8(?) T2-7 clouds ne

For about an hour and ten minutes, I watched the moon amid many clouds to try to see the penumbral lunar eclipse. Greatest Eclipse time was listed as 10:29 UT and Penumbral Magnitude was to be 0.91866. The moon moved N. of the umbra. At times the clouds were

I also scanned the general area between
Achernar (x Eridani) and Fomalhaut (x Ipsilon)
Achernar). The light pollution in the S sky was probably
The main reason for not seeing the comet. There were
also searchlights directed into that part of the sky.

17-F Dec 20-21 03:12-03:00 FT: 287T (Camp Hill)

in SE. Mars and crescent moon had been seen earlier.

17-F Dec 21-22 07:24-08:20 FT: 287T (Garage)

hoping to see the beginning of the lunar occultation of
Saturn, I opened the garage door and saw the moon and
Jupiter and Sirius in the western part of the sky. I
did not notice Saturn which was presumably very close
to the moon, but the moon was dimmed by clouds and
a huge mass of very thick clouds were moving
in from the W. They were about to cover the
moon and they did so within a couple of
minutes or so. That ended any chance of seeing

the disappearance of Saturn as the moon occulted
it. According to prediction, the disappearance was to be
at about 09:00 UT (5:00 A.M. EST). The moon was about
15° to 20° above the western horizon.

Saturn
occulted
missed
because of
clouds.

18-20 Dec 20-20 10:02-11:10 FT: 287T (Garage)

For about an hour and ten minutes, I watched the moon
and many clouds to try to see the perihelion lunar
eclipse. Greatest Eclipse time was listed as 10:29 UT
and perihelion magnitude was to be 0.9186. The moon
moved N. of the umbra. At times the clouds were

2001

Penumbra
Lunar
Eclipse:
subtle, ~~to~~
but
detectable.

quite thick and at times they were thin with some gaps and times when the area of the sky near the moon was clear. When the sky was clear, I was quite certain that I could detect less glare and less brightness "toward the left side" of the moon (at about the 9 to 10 o'clock position of the lunar disk as viewed in the western sky). The moon was 20° to 10° above the western horizon, or about 15° to 5° above the roof of the house across the street. The slight darkening on the "left side" of the lunar disk was quite subtle, but I was able to say that it was detectable, quite definitely, but, of course, I was aware of, and expecting, the event. When a thin layer of clouds covered the moon, the range of darkness or brightness was probably less noticeable. Near the end of the session, the clouds seemed to be moving from the south or the southwest. Overall, the sky in the area of the Full Moon was clear enough to make the observation of this Penumbra Lunar Eclipse well worthwhile.

2002

FL: by
Jan. 1-2 02:00-02:10 UT \wedge S875-6 (bright gibbous moon; some cloud) ne

I observed the bright stars of the winter sky in the E, with the bright waning gibbous moon rising in the NE. Besides the bright six stars around Betelgeuse, brilliant Jupiter (in Gemini and less than 24h after the listed time for opposition: Jan. 1 at 6h. UT) and Saturn (almost like a second "Eye of the Bull" and brighter, at mag. -0.3 , than Aldebaran) were prominent in the E. Fairly heavy clouds dominated the western part of the sky. A bright large gibbous moon, about $2\frac{1}{2}$ after Full Moon was up about 10° in the NE.

quite thick and at times the air with some gaps and times when the area of the sky near the moon was clear. When the sky was clear I was quite certain that I could detect low glare and less brightness toward the left side of the moon (at about the 9 to 10 o'clock position of the lunar disk as viewed in the western sky). The moon was 20 to 10° above the western horizon at about

Partial Lunar Eclipse: Saddle #

15° to 5° above the roof of the house across the street. The slight darkening on the "left side" of the lunar disk was quite subtle but I was able to say that it was detectable, quite detectable but of course I was aware of and expecting the event. When a thin layer of clouds covered the moon the range of darkness or brightness was probably less noticeable. Near the end of the season, the clouds seemed to be moving from the south or the southwest. Overall, the sky in the area of the Full Moon was clear enough to make the observation of this partial Lunar Eclipse well worthwhile.

but detectable

Jan 1-2 02:00-02:10 UT (bright gibbous moon; some cloud) no I observed the bright stars of the winter sky in the E. with the bright waxing gibbous moon rising in the NE. Besides the bright stars around Betelgeuse, brilliant Jupiter (in Gemini) and less than 24h after the listed time for opposition: Jan. 1st (A.H. UT) and Saturn (almost like a second "eye" of the Bull) and brighter at mag. -0.3, than Aldebaran) were prominent in the E. Fairly heavy clouds dominated the western part of the sky. A bright large gibbous moon, about 2 1/2 after Full Moon was up about 10° in the NE.

2002 T.-W. Jan. 8-9 01:10-03:20 FL: by 58(?) T 6-7 (light pollution) ne; 10x256; 10x506

ne: bright stars of winter in E. sky and Regulus rising in NE, Mars, Jupiter in Gem., Saturn in Tau.

- photographed areas of the E. sky, including Canopus above the condo toward the SE, using both the 50 mm f/1.2 lens and the 35-105 zoom lens.

10x256 and 10x506: Saturn and Hyades, Pleiades, Orion's belt and sword area, M42, M44 and area, Jupiter and area in Gemini, area of NGC 2244 in Mon.

W.-Th. Jan. 9-10 23:40-00:10 UT on ^{Beach Access #3} ~~Sanita Beach~~ on the Gulf twl ne

- Shortly after sunset, Denise and I drove to the Gulf, to Beach Access #3 to see Mercury which was now near Greatest Eastern Elongation (listed as Friday Jan. 11 at 23^h - 2 days hence). The ^{sky} to the west and in almost all directions was clear with only very light thin clouds low in the W. Denise saw Mercury almost as soon as we arrived. I saw it about 5 to 10 minutes later and it appeared quite bright and up about 15° to 20° above the westerly horizon. It was listed as mag. -0.6 on Jan. 11. (O.H.). Some of the other stars started to appear before we left the beach.

On arriving back at the condo, Denise discovered the back window on the left side of her car had been smashed out and her purse with her credit cards and cellphone and some cash had been stolen. On reporting the theft of a credit card, she was informed that \$300 had been charged to it. The local sheriff's department sent an officer to gather details about the theft. It was an interesting evening!

00:30-00:45 FL: by 58(?) T 8 (light pollution) ne

- observed Orion and other "winter stars" rising

Mercury
over
Gulf of Mexico

10x50p
 28775-7 (light pollution) ne: 10x50p, 1
 Mr. bright stars of winter in E sky and Rigelus rising
 in NE, Mars, Jupiter in Gen. 2 stars in Tau.
 - photographed over
 above the cordo
 50mm f/1.2 lens
 10x50p and 10x50p: Saturn

Jan 10.
 10:30 UT E
 Cr. Moon and Antares rising in E.

in Gemini, area of NGC 2744 in Mon.
 W-Th Jan 9-10 23:40-00:10
 - shortly after sunset
 Golf, to Beach Access #3 to see Mercury which was
 low near Greatest Elongation (list as Friday
 Jan 11 at 23° - 2 degrees). They to the west out
 in about all directions was clear with only very light
 thin clouds low in the W. Denise saw Mercury almost
 soon as we arrived. I saw it about 2 to 10 minutes
 later and it appeared quite bright and up about
 12° to 20° above the western horizon. It was

listed as mag. -0.6 on Jan 11 (O.H.). Some of the
 other stars started to appear before we left the beach.
 A arriving back at the cordo Denise discovered
 the back window on the left side of her car had been
 smashed out and her purse with her credit cards
 and cellphone and some cash had been stolen. In reporting
 the theft of a credit card, she was informed that 300 had
 been charged to it. The local sheriff's department sent an
 officer to gather details about the theft. It was an
 interesting evening!

2005 T-W Jan 8-9 of 10-03:50 FLIP 28775-7 (light pollution) ne: 10x50p, 1
 Mr. bright stars of winter in E sky and Rigelus rising
 in NE, Mars, Jupiter in Gen. 2 stars in Tau.
 - photographed over
 above the cordo
 50mm f/1.2 lens
 10x50p and 10x50p: Saturn

Mercury
 over
 Gulf, Mexico

interesting evening!
 - observed Orion
 00:30-00:45 FLIP 28775-7 (light pollution) ne: 10x50p, 1
 Mr. bright stars of winter in E sky and Rigelus rising
 in NE, Mars, Jupiter in Gen. 2 stars in Tau.
 - photographed over
 above the cordo
 50mm f/1.2 lens
 10x50p and 10x50p: Saturn

2002

in the E. and Achernar in the S.E.

- photographed areas of Achernar and Procyon and Sirius.

5:30 - 5:35 a.m. EST
10:30 - 10:35 UT FL: by S-8(?) T7-8(!) ne

- observed and photographed the waning Cr. Moon and some of the stars of Scorpius rising in the E. (See diagram.)

Th.-F. Jan. 10-11 00:35 - 00:40 UT FL: by S8(?) T7 (light pollution) ne

- observed and photographed some of the stars and areas of the E. sky, including area of Achernar above the building in the S.E.

03:30 - 03:45 UT FL: by S8(?) T7 (lp) ne; 10x50b

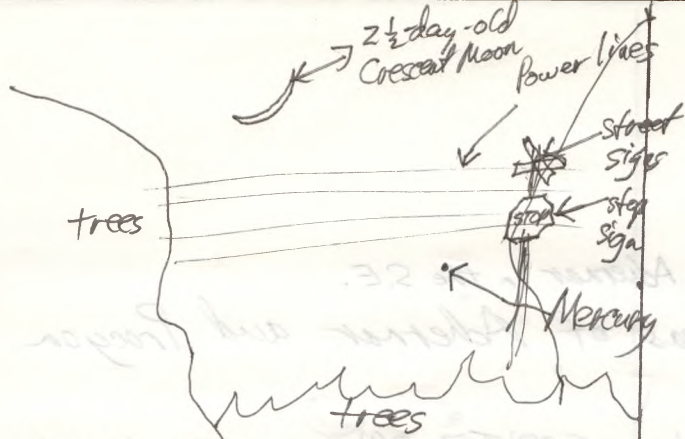
ne: - observed Saturn, Jupiter, and "winter stars" in the E. sky.

10x50b: - observed M42, M41 area, areas of Gemini and constellations Leo and Lepus, Pleiades, Hyades and Saturn, Jupiter, area of Capricorn in S.E.

M.-T, Jan. 14-15 23:45 - 23:50 UT FL ^{Beach Access #1} on Bonita Beach on the Gulf twl ^{10x50b} ne; N

ne and 10x50b: Denise and I went to the Beach Access on the Gulf of Mexico to try to see the crescent moon below Mercury. She stayed in the car, and I went along the boardwalk to a point where I had a good view over the gulf, but I was not able to see either the crescent moon or Mercury because of the clouds. The clouds were quite thick but there were a few breaks down low and perhaps to the left of where I hoped to see the moon and the planet. Other parts of the sky had partly clear areas, and I had thought that it might be worth the effort to try to see them.

- Hoping to see
Crescent Moon
and Mercury



Jan. 15, 2002
23:50 UT

2 1/2-day-old Crescent Moon and Mercury
as viewed from "southeast of the street"
Village View Blvd.

2002

Helping to see
Crescent Moon
and Mercury

2002.

T.-W. Jan. 15-16 22:55-23:05 UT FL: by ^{FL: by} _{twl} ne

- observed the earth's shadow rising in the NE and ENE, and photographed it

23:35 - 23:50 UT FL: in ^{also at "end of street"} _{front of condo}; _{twl ne; 10x25b}

- ne and 10x25b: observed and photographed the young crescent moon (about $2\frac{1}{2}$ days old) with the planet Mercury about 12° below and to the right from it. (See diagram.)

Th.-F. Jan. 17-18 00:05-00:20 UT FL: by S-8(?) T6-7 (light pollution) _{ne}

- observed and photographed "light pollution over condo to SE, and Procyon and Sirius rising in ENE and E, and Sirius and its reflection, - also observed Mars and crescent moon high in SW and Saturn in Taurus and ^{Jupiter} ~~Genetic~~ in Gemini and the six bright stars of Winter in the area of Orion in E.

T.-W. Jan. 22-23 02:25-02:30 UT FL: by S8 T6-7 (gm; light pollution) ne

- stars of winter in SE, including Canopus very bright and up about 10° in SE, gibbous moon near Aries-Taurus border, Saturn in Taurus, Jupiter brilliant in Gemini.

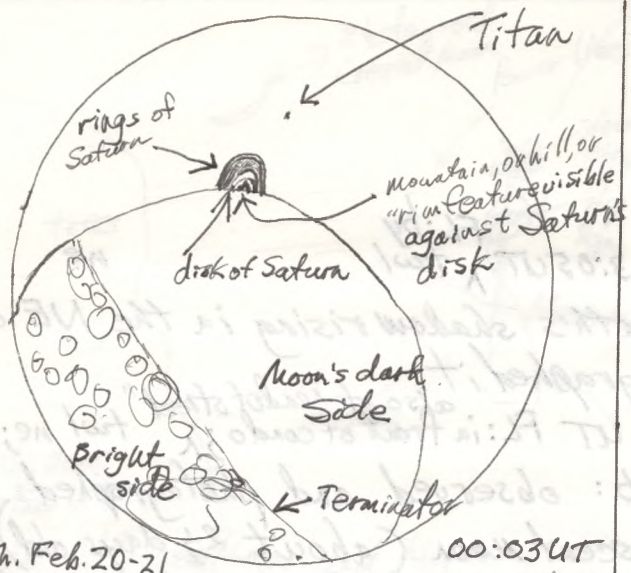
W.-Th. Jan. 30-31 00:25-00:32 FL: la S8(?) T5-7 (some cloud) _{passage} ne

155

- Denise and I watched the _{passage} in the W and NW of the International Space Station above the houses across the street. It appeared about mag. 2.5 and travelled from W to N about 20 to 30 degrees above the horizon.

M.-T. Feb. 4-5 01:45-02:45 UT FL: la S8-9(?) T6-7 (usual light pollution) ^{12 $\frac{1}{2}$ "} ₃₂ ne

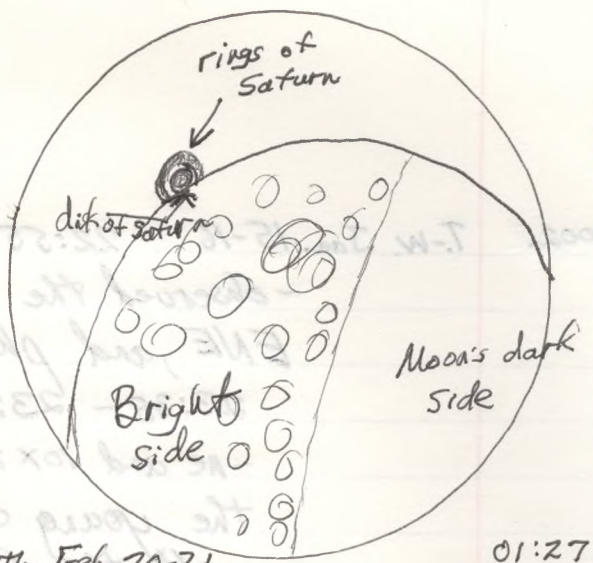
Denise and I observed Jupiter and three of its moons, Saturn



W.-Th. Feb. 20-21

00:03 UT

View in telescope of disappearance phase of Saturn at beginning of the occultation



W.-Th. Feb. 20-21

01:27 UT

View in telescope of reappearance of Saturn.

2002

and Titan, M41 (excellent view!), M42 area (the nebulosity was very washed out, although the trapezium and the 3 stars in a row nearby were visible), Pleiades (or ^{rather} part of it since the whole cluster did not fit into the field of view at one time). Jupiter and Saturn were quite near the zenith.

T.-W. Feb. 12-13 23:25-23:45 UT Fl: ^{Barefoot Beach shoreline} n twl ne; 10x50b; 10x25b.

- Denise and I went by car to the park at Barefoot Beach with the hope of seeing a very young crescent Moon. Sunset had been at 23:18 UT (6:18 pm E.S.T.) and moonset would be at 23:45 (6:45 pm E.S.T.) The moon would be about 16 hours old at 23:41 UT since New Moon had been at 7:41 UT (24:10 am E.S.T.) However, we did not see it. The western sky was very cloudy up to about 5° to 10° and to a greater distance in some directions.

Su.-M. Feb. 17-18 08:20-08:30 UT S-8(?) T6-7 (light pollution) ne

- observed and photographed part of the constellation Scorpius up in the E.
- photographed some of the stars in the SSE, hoping to obtain a photograph of some of the stars of the Southern Cross which should have been up in the S., but there was considerable light pollution in that area of the sky.

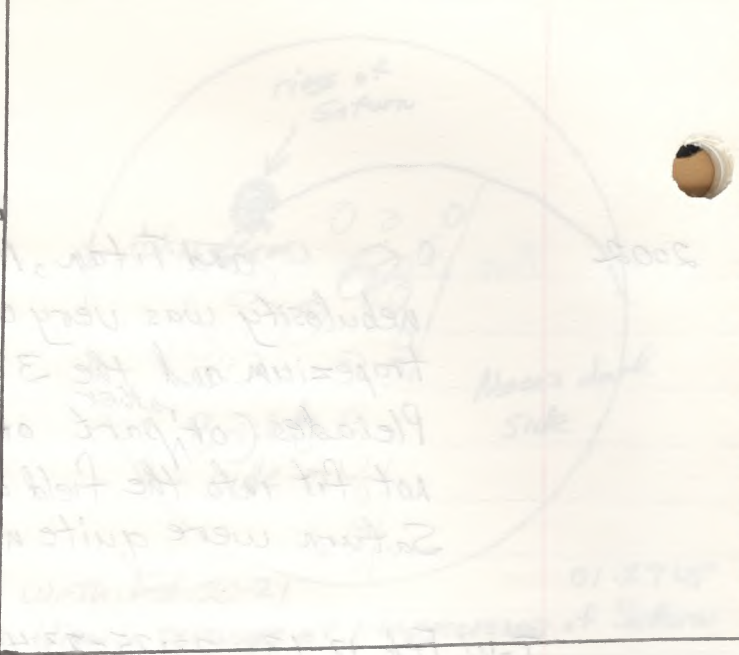
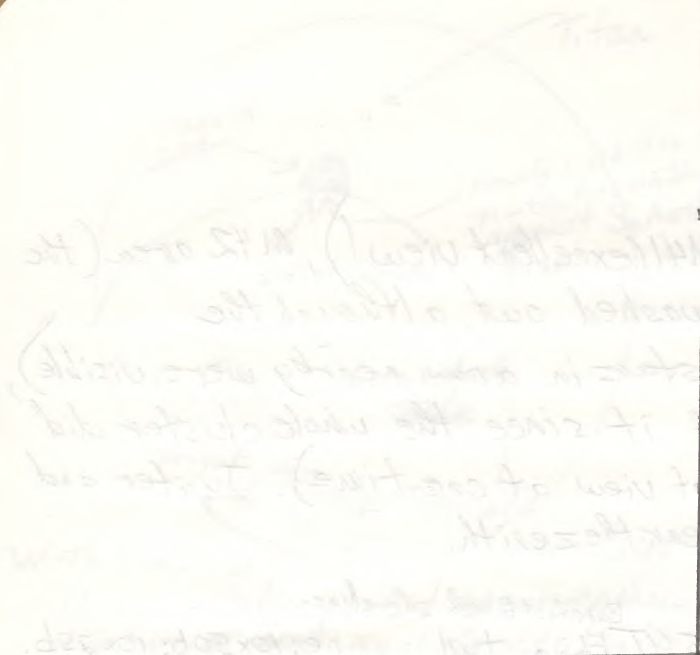
W.-Th. Feb. 20-21 23:55-00:00 UT Fl: 1a twl $12\frac{1}{2}''$, 32

I observed the disappearance of Saturn at the beginning of the occultation at about 00:03 UT (7:03 p.m. E.S.T.) which was the announced time for the event

Feb. 20-21 23:22 - 04:00 UT. Feb. 12. Jul 12:32
 I observed the disappearance of Saturn at the
 beginning of the occultation at about 00:03 UT
 (7:03 pm. E.S.T.) which was the announced time for the event

2. But there was considerable light pollution
 in that area of the sky.
 Southern Cross which should have been up in the
 obtain a photograph of some of the stars of the
 - photographed some of the stars in the SSE, hoping to
 compare up in the E.

2m - M. Feb 17-18 CE 20:00-23:00 UT (light pollution) he
 - observed and photographed part of the constellation
 to a greater distance in some directions
 was very cloudy up to about 7° or 10° and
 However we did not see it. The inaction sky
 stage the moon had been at 7:41 UT (6:41 am E.S.T.)
 moon would be about 10 hours old at 23:41 UT
 moonset would be at 23:02 (6:02 pm E.S.T.) the
 sunset had been at 23:18 UT (6:18 pm E.S.T.) and
 with the hope of seeing a very young crescent moon.
 - Denise and I went by car to the park at Bunker Beach



Saturn were quite dark because
 not that the field of view of camera. The star and
 Pleiades (of part of it since the main cluster did
 disappear in the 3 stars in area nearby were visible)
 regularity was very washed out around the
 (the area)

2002
 2002
 2002

2002

Saturn
occultation -
disappearance

in Sky and Telescope Feb. 2002, page 72-74. It took about a whole minute for the planet to go through the "disappearing process," if the rings were included. I observed for about 5 minutes before. During the disappearing, there was a protruding feature of the moon, a hill, mountain, or crater rim, that was seen against the disk of the planet. About 6 minutes after the complete disappearance of the rings (i.e., at about 00:09 or 00:10 UT) the moon Titan disappeared. I was joined by some people whom I invited to see the event. They were a woman who was walking her two dogs and the woman she had been talking with on the street near the house, and also a couple from Connecticut who lived in the other ground-floor unit of the condominium and who were the parents of the chef who lived there. The latter couple missed seeing the disappearance, but I showed them Jupiter and 3 of its moons and M42 along with the Trapezium. I also pointed out some bright stars and constellations. Denise returned from work and saw Jupiter, M42 and lunar craters.

01:25 - 01:40 UT FL: 1a S-8(?) T6 (light pollution) $12\frac{1}{2}''$, 32

Saturn
occultation -
reappearance

Denise and I observed the gradual reappearance of Saturn on the bright side of the First Quarter Moon. It seemed to take about a minute, perhaps, for the rings to emerge completely, after she had spotted the planet when it was already about $\frac{1}{2}$ emerged from the edge of the bright moon. The moon was about 10° or so from the zenith. On its re-appearance, Saturn seemed fainter than I had expected it to be, probably because of the glare of the moon.

2002

Saturn occultation disappearance

in sky and telescope Feb 2002, page 2-94. It took about a whole minute for the planet to go through the "disappearing process", if the rings were included. I observed for about 5 minutes before. During the disappearing, there was protruding feature of the moon, all, mountain, or crater rim, that was seen against the disk of the planet. About 5 minutes after the complete disappearance of the rings (i.e. at about 20:10 or

20:10 UT) the moon Titan disappeared. I was joined by some people when I invited those the event. They were a woman who was walking her two dogs and the woman she had been talking with in the street near the house, and also a couple from Connecticut who lived in the other ground-floor unit of the condominium and who were the parents of the child who lived there. The latter couple missed seeing the disappearance, but I showed them Jupiter and 3 of its moons and M42 along with the Trapezium. I also pointed out some bright stars and constellations. Boize returned from work and saw Jupiter, M42 and last craters.

Saturn occultation disappearance

01:25 - 01:40 UT Feb 2002 (light pollution) 12.5, 32. Denise and I observed the gradual reappearance of Saturn on the bright side of the first Quarter Moon. It seemed to take about a minute, perhaps for the rings to emerge completely, after she had spotted the planet when it was already about $\frac{1}{2}$ emerged from the object the bright moon. The moon was about 10° or so from the south. (It re-appearance, Saturn seemed farther than I believed it to be, probably because of the glare of the moon.

2002

(6:20 - 6:30 a.m. E.S.T.)
Th.-F. Feb. 28-Mar. 1 11:20 - 11:30 UT FL: by twl (cloudy) ne; 10x25b

attempt to see
Space Shuttle
after liftoff

ne: After being at the February monthly meeting of the Everglades Astronomical Society the previous evening and hearing that the launch of the Space Shuttle would be at 11:22 UT (6:22 a.m. E.S.T.) (although I had previously heard about it but did not have the exact time), Denise and I prepared to try to see the Space Shuttle in the distance after liftoff, since Denise had previously seen a similar event from in or near Fort Myers. However, the weather was cloudy. Denise watched what was happening on television and we watched the clouds toward the NE, but did not see any evidence of the vehicle or a contrail.

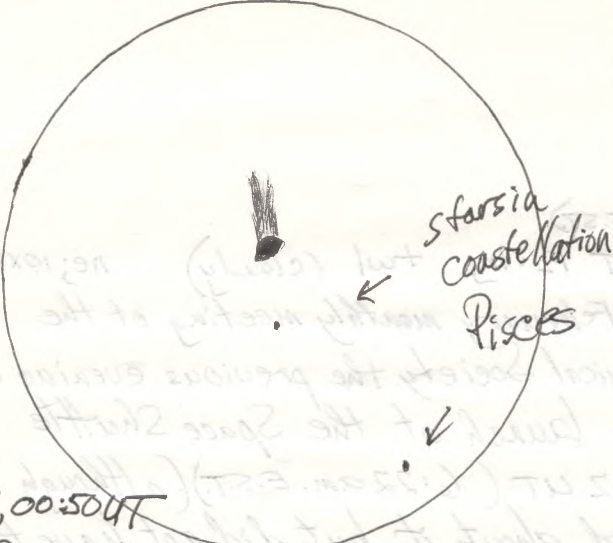
10x25b: I observed one of the few breaks in the clouds, or a "hint of a break", but did not see any evidence of the Space Shuttle.

Village View Blvd.
Su.-M. Mar. 3-4 01:00 - 01:10 UT FL: at s. end of the street, N SPT 6-7 ne; 10x50b

- tried to see
Comet Ikeya-Zhang.

ne: Hoping to be able to see the Comet Ikeya-Zhang which had been discovered about a month ago ^{by amateurs} in Japan and China, I went to the end of the street where I could see the bright winter stars high in the S. with Jupiter in Gemini, Saturn in Taurus and Mars in the SW to the left of the stars of Aries. Below Aries where I looked for the comet, the sky seemed too bright with light pollution and later with clouds to see the comet.

10x50b: Mars and bright stars of Aries, Saturn and stars of the Hyades, Jupiter and some stars of Gemini, areas of Orion and Lepus, areas of Auriga including possible



stars in
constellation
Pisces

Mar. 9, 00:50 UT

Comet Ikey-Zhang in field of
10x25 binoculars

Since Ikey-Zhang had previously been seen in a similar event there is or near for Mars. However, the weather was cloudy. Denise watched what was happening, or television, and we watched the clouds toward the NE, but did not see any evidence of the vehicle or a contrail.

I observed one of the few breaks in the clouds or a hint of a break, but did not see any evidence of the space shuttle.

24-M. Mar. 3-4 01:00-01:10 UT
at a distance of 287.7 million km from Earth.

Mars is the 2nd brightest star in the sky after the Sun. Below Mars is the 3rd brightest star, Jupiter. Below Jupiter is the 4th brightest star, Saturn. Below Saturn is the 5th brightest star, Uranus. Below Uranus is the 6th brightest star, Neptune. Below Neptune is the 7th brightest star, Pluto. Below Pluto is the 8th brightest star, Eris. Below Eris is the 9th brightest star, Haumea. Below Haumea is the 10th brightest star, Makemake.

After being at the University of Arizona's Lunar and Planetary Laboratory, I was contacted by the Space Shuttle program. I was asked to see the shuttle launch on March 9, 1990. I was able to see the shuttle launch on March 9, 1990, at 11:20 AM. The shuttle was launched from the Kennedy Space Center, Florida. The shuttle was launched on the Space Shuttle Challenger. The shuttle was launched on the Space Shuttle Challenger. The shuttle was launched on the Space Shuttle Challenger.

Comet Ikey-Zhang was discovered on March 24, 1990, by Japanese astronomers. It was discovered about a month ago, in Japan. I went to the end of the stars where I could see the bright winter stars like in the 2. I saw Jupiter in Gemini, Saturn in Taurus and Mars in the 2nd. Below Mars is the 3rd brightest star, Jupiter. Below Jupiter is the 4th brightest star, Saturn. Below Saturn is the 5th brightest star, Uranus. Below Uranus is the 6th brightest star, Neptune. Below Neptune is the 7th brightest star, Pluto. Below Pluto is the 8th brightest star, Eris. Below Eris is the 9th brightest star, Haumea. Below Haumea is the 10th brightest star, Makemake.

2002

Faint views of M36, M37, and M38, but I was not completely sure of them. I did not knowingly see the Comet Ikeya-Zhang, probably because of sky brightness in the area and later because of clouds that moved in.

F-S. Mar. 8-9 00:20-01:10 UT FL: Bonita Beach, ^{along the Gulf of Mexico (Southeast)} S-8(?) T5-8 ne; 10x25b

ne: Deise and I went to Bonita Beach hoping to see and photograph Comet Ikeya-Zhang which had brightened to about mag. 5 or brighter according to the Sky and Telescope website. We saw the bright planets among the winter constellations and in the W. - Saturn in Taurus, Mars up about 25° in the W. and Venus low in the W. - about 10° , later 5° , and then about 1° above the western horizon.

10x25b: Scanning with the small binoculars about 10° below Mars in the W., I spotted Comet Ikeya-Zhang at about mag. 5. in the constellation Pisces. It had been discovered by amateurs in Japan and China on Feb. 1. The tail which was pointing upward and slightly to the left seemed to be about $\frac{1}{2}^\circ$ long. There were clouds in the W below the comet and later some haze or light clouds in the area of the comet. (See diagram.)

Comet Ikey-Zhang
(C/2002 C1)
(v)

Photographing: - area of Venus near W. horizon, area of Comet Ikeya-Zhang (C/2002 C1) in W.; buildings along shoreline to the S. including a house with an observatory on the roof.

Sat. Su. Mar. 9-10 01:50-02:30 UT FL: Ia S-8(?) T6-8 ne; $12\frac{1}{2}''$, 32, 12.

ne: bright stars of winter, Jupiter, Saturn, Mars.

Denise's 12 1/2" Meade Newtonian
Telescope parameters:

FL: 1525 mm

D: 318 mm


f/ : f/4.8


Magnification:

Ocular

32 mm : 47.7X

12 mm : 127.1X

 Cr. Moon
(1:20UT)

 Cr. Moon
(10:55UT)

trees in distance

E

"paddle"

Moon rising in E on morning of Mar. 11, 2002

2002

First light
for new 12mm
TeleVue Radian
eyepiece

12½": I observed Saturn and Titan using the
the 32mm ^{Plossl}ocular (at 48X) and the new 12mm
TeleVue Radian eyepiece (at 127X) which
Denise had recently obtained at Scopetronix
when she took back the 8mm eyepiece which she
had purchased there but with which she was
not happy. (Scopetronix is in Cape Coral.) With
the new eyepiece I also observed M42
including the Trapezium, and Jupiter and
the 4 Galilean moons. Denise also observed
Jupiter and its moons and Saturn and Titan, but
she was not completely happy with the view in the
new eyepiece. I also thought that the views,
though better than they had been in the 8mm
eyepiece were not as crisp or sharp as I
expected they should be.

5.-M. Mar. 10-11 01:00-01:15 UT FL: ^{Village View Blvd.} at end of street ^{58(?) T 5-8 (clouds scattered)} ne; 10x25b

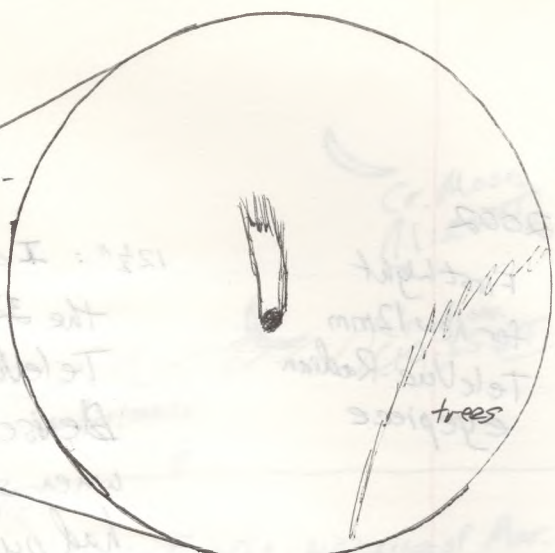
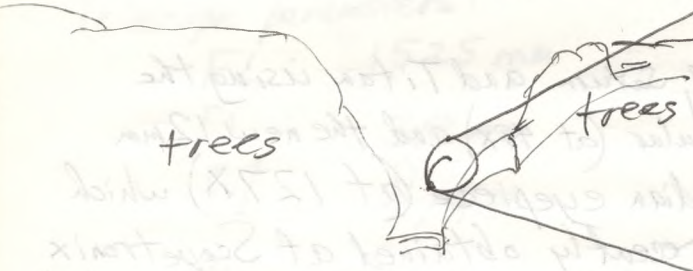
me: Hoping to see Comet Ikeya-Zhang, I went to the
end of the street and saw Jupiter, Saturn, and
Mars but did not see the comet. There were
"heavy" clouds in many areas of the sky.

10X25b: Jupiter, Saturn and Hyades, Mars and the
bright stars of Aries nearby, but the
comet was not seen.

(5:55-6:20 a.m. E.S.T.)
10:55-11:20 UT FL: by twl ne

me: -observed the thin Crescent Moon rising from amid the
trees in the E. until it was about 10° above the horizon.
Mercury was not seen, although it was apparently
to the left and down from the moon. (See diagram.)
-photographed the area of the Crescent Moon.

Mars → • • Aries

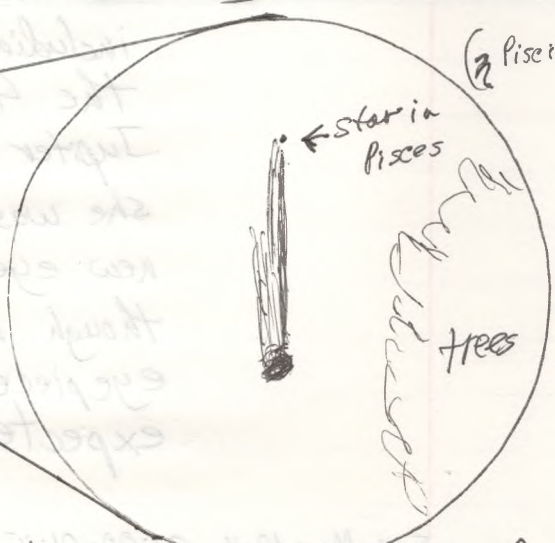


Mar. 13 04:00 UT W

View to W showing view of area where Comet Ikeya-Zhang was seen.

View in 10x25 binoculars of Comet Ikeya-Zhang which was not seen for sure naked eye.

← → Pleiades



Mar 15 01:00 UT W

View to W. showing view of the area where Comet Ikeya-Zhang was seen.

View in 10x25 binoculars of Comet Ikeya-Zhang which was not seen for sure naked-eye

...observed the ...
 ...it was about 10° above the horizon.
 ...Mercury was not seen, although it was apparently
 to the left and down from the moon. (See diagram.)
 -photographed the area of the Crescent Moon.

2002. T.-W. Mar. 12-13 01:00-01:10 UT FL: at end of street^{Village View Blvd.} S-P(1) 6-8 ne; 10x256
ne: stars of winter in S., Jupiter in Gem, Saturn in Tally, Mars near or in Aries, but Comet Ikeya-Zhang was not seen with certainty naked-eye, though it may have been about mag. 4.5

10x256: Jupiter, Saturn and Hyades, Pleiades, Mars, bright stars of Aries, Comet Ikeya-Zhang (C/2002 C₁) with evidence of a tail (See diagram.) The tail was probably about $\frac{1}{2}$ degree in length and quite faint probably because of light pollution.

W.-Th. Mar. 13-14 01:15-01:20 UT FL: at end of street^{Village View Blvd.} S-P(1) 6-8 ne; 10x256
ne: I walked down to the end of the street hoping to get a glimpse of Comet Ikeya-Zhang (C/2002 C₁), but I did not manage to see it. It may have been low and behind the trees. Objects I saw were Jupiter, Saturn, Mars, the bright stars of winter, Canopus in the SSE.

10x256: Jupiter, Saturn and Hyades, Mars in W. and 3 bright stars of Aries; looked for the comet, but was not sure of seeing it.

(7:00 - 7:05 pm EST)
Th.-F. Mar. 14-15 00:00-00:05 UT FL: near tennis courts on street twl ne

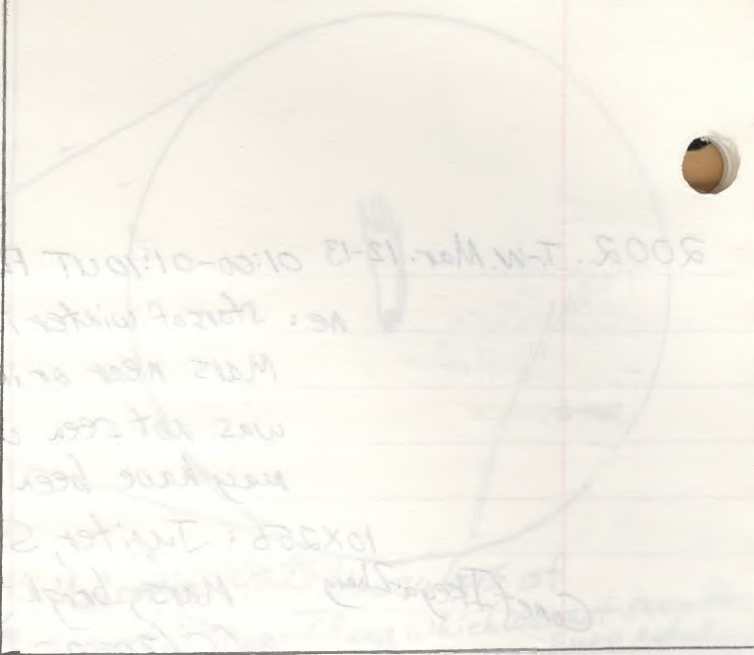
- observed Venus very bright in the W. at altitude about 10°; looked for, but was not sure of seeing very young moon, ^{about 22^h old} n.

00:50-01:00 UT FL: at end of street^{Village View Blvd.} S-P(1) 6-8 ne; 10x256

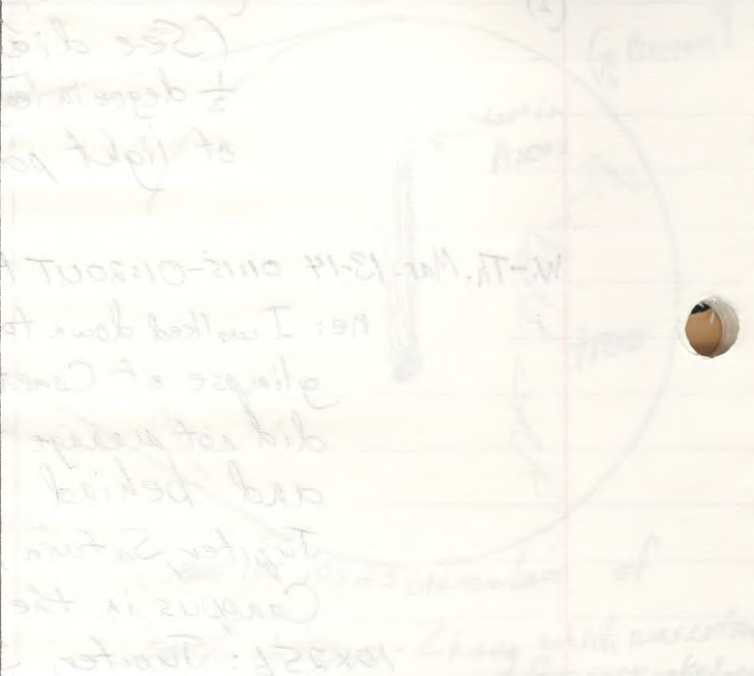
ne: winter stars in S., Jupiter, Saturn, Mars, Canopus.

10x256: Jupiter, Saturn and Hyades, Mars and stars of Aries, Comet Ikeya-Zhang (C/2002 C₁) with tail over 1° long. (see diagram.)

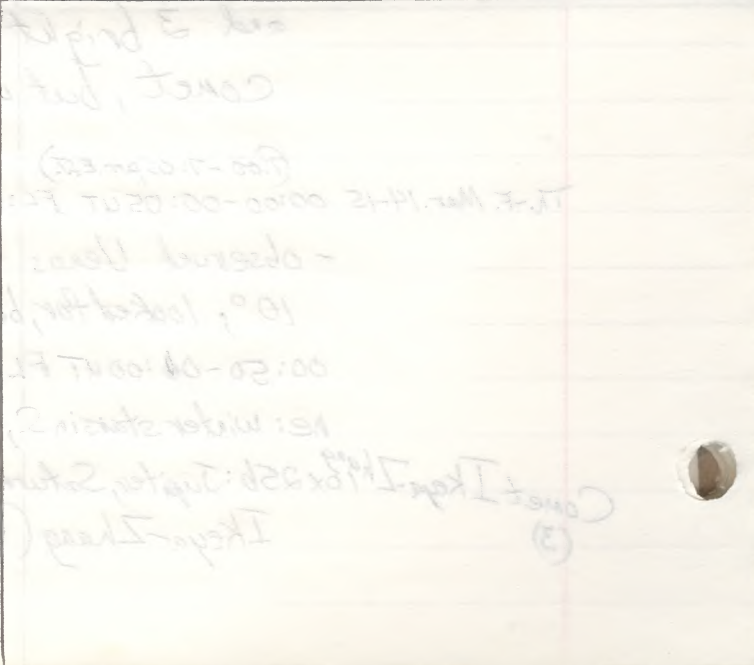
2002. T-W Mar. 12-13 01:00-01:10 OUT
 No: stars of winter, Jupiter in Aries, but comet Ikeya-Sharp was not seen with certain naked-eye magnitude. Perhaps been about mag. 4.2.
 Jupiter, Saturn and Mars in W.



(See diagram) The fainter probably about 1/2 degree to the left and quite faint probably because of light pollution.
 W-Tu. Mar. 13-14 01:00-01:10 OUT
 No: I walked down to the end of the street hoping to get a glimpse of Comet Ikeya-Sharp (2002 C1), but I did not manage to see it. It may have been low and behind the trees. Objects I saw were Jupiter, Saturn, Mars, the bright stars of winter, and behind the trees. Objects I saw were Jupiter, Saturn, Mars in W.



and 3 bright stars of Aries; looked for the comet, but was not sure of seeing it.
 (See diagram)
 T-F. Mar. 14-15 00:00-00:05 OUT
 - observed Mars - 10°; looked for, but not seen. Very bright in the W. at altitude about 30°.
 00:50-01:00 OUT
 No: winter stars, Jupiter, Saturn, Mars, Comet Ikeya-Sharp (2002 C1) with tail over 10° long (in sky) and stars of Aries, Comet Ikeya-Sharp (2002 C1) with tail over 10° long (in sky).



Relative Sunspot Numbers

Date: My
2001 Observation

July 24 72

26 60

27 68

28 54

30 47

31 74

Aug. 1 41

3 87

4 141

5 167

6 137

7 136

8 118

9 89

14 103

15 110

17 46

18 99

22 102

2020 24 75

25 101

27 111

29 100

30 104

Sept. 1 85

2 88

3 108

5 124

6 152

7 193

9 184

11 157

12 185

13 207

14 144

15 154

16 93

17 117

18 140

2042 Sept 23 183

29 178

Oct. 30 155

1 210

2 117

4 126

8 77

9 68

10 55

15 128

18 168

20 218

22 179

28 134

29 138

30 138

Nov. 6 145

7 176

11 132

12 127

13 137

2060 16 109

17 102

20 92

23 74

Dec. 7 131

9 119

