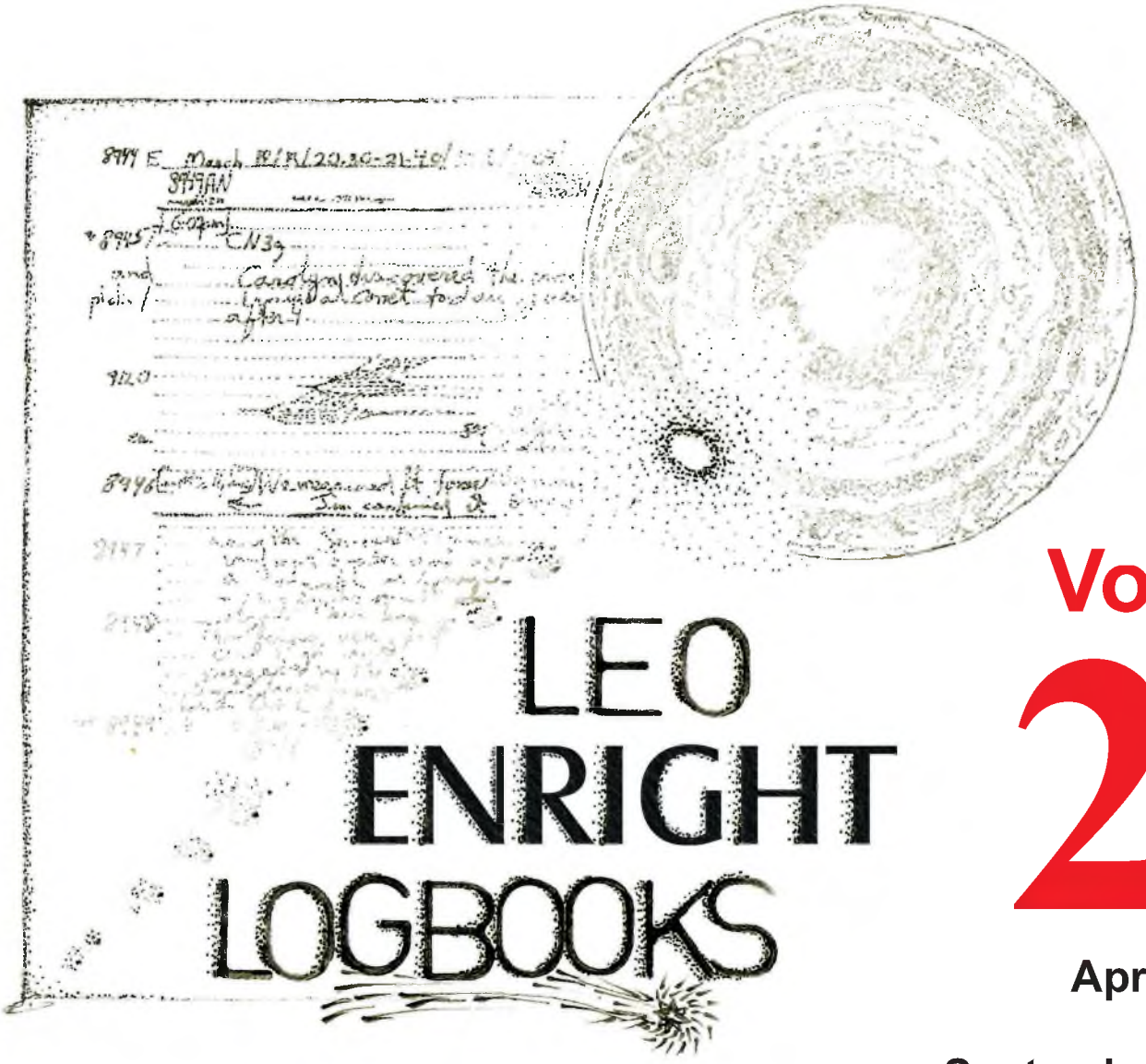

LEO ENRIGHT LOGBOOKS

Volume 28

April 21, 2007
to
September 25, 2007

28

EXPERT®

Leo Enright
Observing Log
2007, Apr. 21 — 2007, Sept. 25

108 Pages

3 SUBJECT NOTEBOOK
CAHIER 3 SUJETS

- **Ruled Paper / Papier ligné**
- **20.3 cm x 26.7 cm**

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2007, Aug 12: Active Meteor Showers

I Perseids (7/17-8/24) ZHR 100
59 k/s

II S. i Aquarids (7/25-8/15) 8/4 ZHR 2
34 k/s

III N & Aquarids (7/15-8/25) 8/9 ZHR 4
42 k/s

IV k Cygnids (8/3-8/25) 8/18 ZHR 3
ad.: 19 0h +59° 25 k/s

V. N i Aquarids (8/11-8/31) 8/20 ZHR 3
31 k/s

2007
July 13:
- since June 8th meeting: 9hr
17 solar obs. in white light
and 17 in Hα
on June 9, 10, 12: R.S.N- 24, 24, 13 hr
on June 13, 14, 15, 17, 21, 22, 23, 24: 0
on June 25, 26, 30, July 2, 3, 12:
11, 12, 14, 17, 12, 18.
Other entries: 20
June 9-10: Shadow From Jupiter!

Observing Log

Code:

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

Time:

UT = Universal Time

Places:

OO = Oso Observatory
nd = north deck
sd = south deck
sh = shoreline of lake
SS = solar station
t = table at solar station
in = indoors
r = roof of house
ice = ice on lake
y = yard
la = Laneway by = backyard
FL = Florida pl = pool

Instruments:

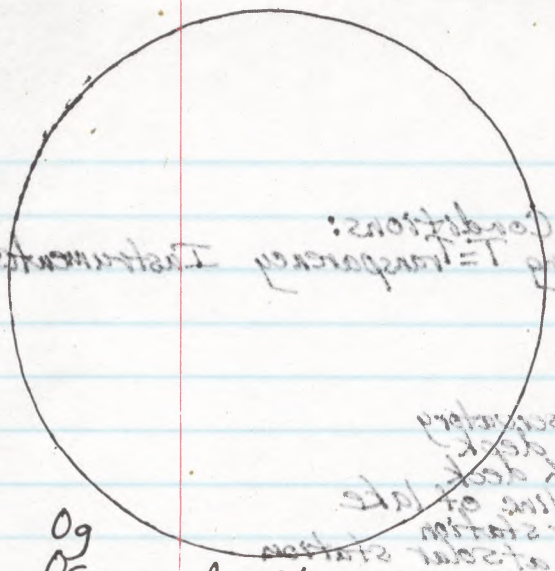
C-14 = Celestron 14 - 35.5cm SCT
C-8 = Celestron 8 - 20cm SCT
Ast = Astroscan 2001 - 10.5cm RFT
12½" = Denise's 32cm Meade Dobsonian
20x100b = Celestron 20x100 binoculars
11x80b = 11x80 binoculars
9x63b = 9x63 binoculars
7x35b = 7x35 binoculars
18X50ISb = Canon 18X50 IMAGE STABILIZED binoculars
P.S.T. = Coronado Personal Solar Telescope
32 = 32mm ocular
32-2 = 32mm 2" ocular
K = Kellner
O = orthoscopic
Ko = König
WA = Wide Angle
P = Plössl
ph = photography
b/b = piggyback
o/a = off axis
Ba = Barlow
A.P.F. = Astrophysics Solar Filter
T.O.F = Thousand Oaks Solar Filter

Objects:

PN = Planetary Nebula
GC = Globular Cluster
OC = Open Cluster
SG = Spiral Galaxy
LPV = Long Period Variable
DS = Double Star

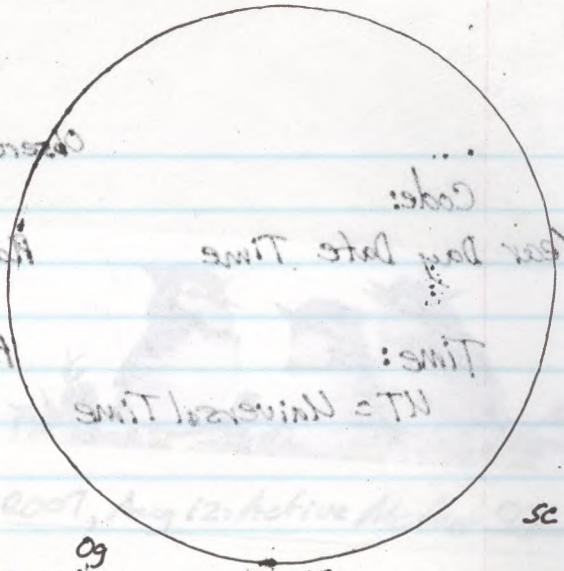
Atlases:

U = Uranometria 2000.0
U210 = Uranometria 2000.0 Chart 210
AAVSA = AAVSO Variable Star Atlas
Cam = Cambridge Star Atlas (2000.0)
MSA = Millennium Star Atlas
UDSA = Uranometria 2000.0 Deep Sky Atlas
UDSA210 = Uranometria 2000.0 Deep Sky Atlas Chart 210.



Og
Os
RSNO

Apr. 21
19:00 - 19:05 UT



Og
Os
RSNO

Apr. 22.
18:15 - 18:20 UT

2007 Sa. Apr. 21 19:00-19:05UT(?) Isabel Turner Library, Kingston 5" reflector
sun Og Os RSNO

During Astronomy Day activities in Kingston, I observed the sun with at least one telescope, one belonging to Hank Bartlett and probably one other belonging to Nora Welbank.

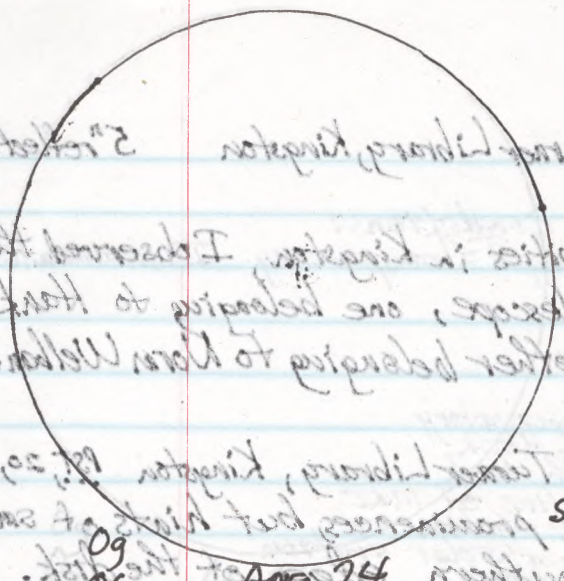
Sa Apr. 21 1920-19:25 UT Isabel Turner Library, Kingston PST, 20, 15.5
sun in Hα - no obvious prominences, but hints of small ones perhaps, at the southern edge of the disk. With the larger Coronado Hα telescope that had been brought to the Astronomy Day Activities by Dr. Terry Bridges, I saw an arching, almost circular prominence near the 3 o'clock position on the rim of the solar disk.

Sa. Su. Apr. 21-22 02:55-03:10UT nd STT7(cml) ne
With Venus about 5° above the NW horizon and the bright crescent moon about 20° above the WNW horizon, I observed after coming home from Astronomy Day activities in Kingston and after eating at Boston Pizza. I saw the stars of Spring in the southern sky and two meteors that were probably Leonids in the NE.

Su. Apr. 22 18:15-18:20UT t C-8, 32, 28, 20, 15.5
sun. Og Os RSNO

Su. Apr. 22 18:25-18:30 UT nd PST.; 20, 28, 20E, 15.5
sun in Hα - only slight hints of small prominences on the southern rim of the sun.

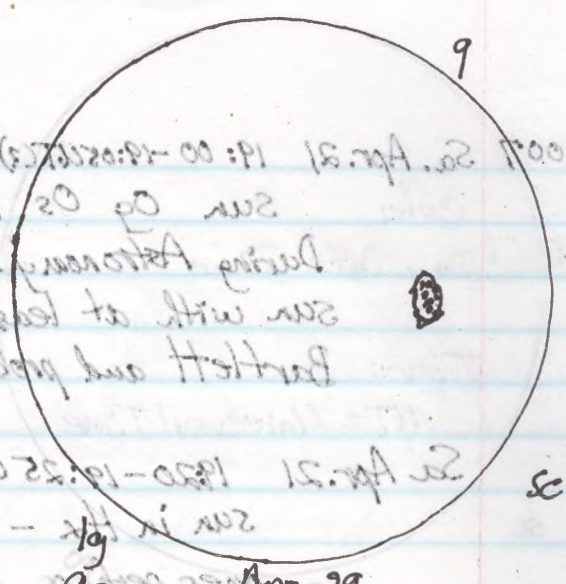
S.-M. Apr. 22-23 03:35-03:30UT nd ty STT7(cml) 18X50LSD ne; A ne: stars of spring; crescent moon about 6 days old well up in the NW; Venus had been seen earlier in



Og
OS
RSNO

Apr. 24
17:15 - 17:20 UT

SC



tg
9S
RSNI9

Apr. 29
17:55 - 18:00 UT

SC

2007 NW; Saturn high in the W.; a bright glow to the right of the moon - which I thought might have been auroral or possibly light reflected on a cloud. I also saw 2 meteors, one a Lyrid and one not a Lyrid.

M.-T. Apr. 30 - May 1 02:15 - 02:20 UT nd STT5 (gml) ne
Venus about 20° above the NW horizon, and extremely bright. Almost Full Moon in the SSE and about 2° down from Spica; Saturn well up in the W.

see next page

18x50 15b: M65, M66, M13, M92, area of M104 (or thereabouts), M51, area of α Librae and β Librae

Tu. Apr. 24 17:15 - 17:20 UT t c-8, 32, 28, 20, 15.5
Sun 0g 0s RSN0 T. O.F.

Tu. Apr. 24 17:25 - 17:30 UT nd P.T.; 20, 28, 20E, 15.5
sun in Hα - one definite curling prominence on the N. edge, and hints of small prominences elsewhere.

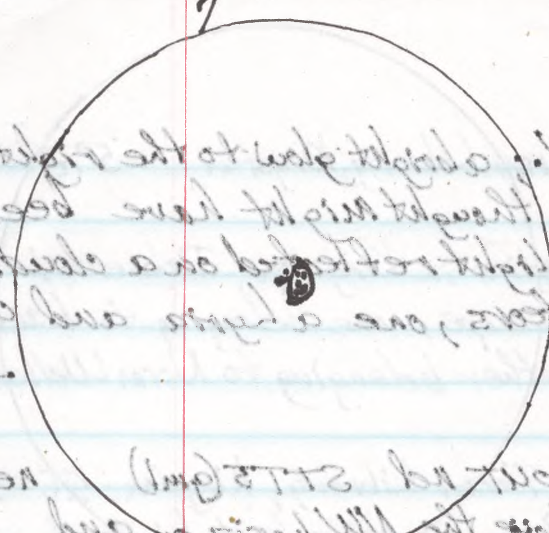
T.-W. Apr. 24-25 02:45 - 02:55 UT nd S?T5 (fgml) ne
- Venus about 10° above the NW horizon, Regulus, and Saturn very high in the WSW with the First Quarter Moon about 4° to the right of Saturn; Vega about 10° above the E horizon; stars of spring in the S. and SW.

Su. April 29 17:55 - 18:00 UT t c-8, 32, 28, 20, 15.5
Sun 1g 9s RSN19 T. O.F.

Su. Apr. 29 18:05 - 18:10 UT nd
sun in Hα - hints of small prominences in the South Pole area.

2007

NW; Saturn high in the W; a bright glow to the right of the Moon - which I thought might have been auroral or possibly light reflected on a cloud. I also saw 2 meteors, one a Lyrid and one not a Lyrid.



Apr. 30 18:30-18:35 UT RSN17 19/15

M.-T. Apr. 30-May 1 02:15-02:30 UT nd S7T5(gml) ne
Venus about 20° above the NW horizon, and extremely bright. Venus + Full Moon in the SSE and about 3° down to the ..., Saturn well up in the W.

See next page

12x50ish: M8, M6, M13, M92, area of M7 & thereabouts, M51, area of α Librae and β Librae

Tu. Apr. 24 17:15-17:20 UT t   c-8,32,28,29,15.5
Sun 9g 9s RSN10   7.0.F.

Tu. Apr. 24 17:25-17:30 UT nd   PST:20,28,20E,15.5
Sun in Hα - one definite curling prominence on the N. edge, and hints of small prominences elsewhere.

T.-W. Apr. 24-25 02:45-02:55 UT nd S7T5(gml) ne
- Venus about 10° above the NW horizon, Regulus and Saturn very high in the WSW with the First Quarter Moon about 4° to the right of Saturn; Vega about 10° above the E horizon; stars of spring in the S. and SW.

Su. April 29 17:55-18:00 UT t   c-8,32,28,29,15.5
Sun 1g 1s RSN19   7.0.F.

Su. Apr. 29 18:05-18:10 UT nd
Sun in Hα - hints of small prominences in the South Pole area.

2007 M. Apr. 30 18:30-18:35 UT t C-8, 32, 28, 20, 15.5
sun lg 7s RSN17 T.O.F

M. Apr. 30 18:40-18:45UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - a prominence at about 4 o'clock position and some hints of prominences in the southern rim, and white faculae near the sunspot group, and one or two possible dark filaments in the area to the left, ~~of the~~ in the field, from the sunspot group.

[See bracketed entry on previous page.]

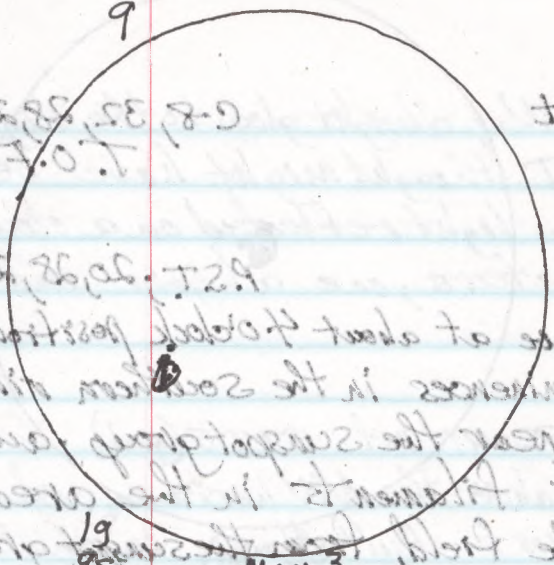
T.-W. May 1-2 03:25-03:30UT nd S?T5(fml) ne
- brilliant Venus about 5° above the NW horizon, Vega in the E sky, the handle of the Big Dipper near the zenith, Regulus and Saturn well up in the W., the Full Moon low in the SE, Spica in the SSE with the Full Moon to the left and down about 14° from Spica.

W. May 2 15:30-15:35 UT t C-8, 32, 28, 20, 15.5
sun lg 9s RSN 19 T.O.F.

W. May 2 15:35-15:40 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of prominences on the southern rim of the solar disk.

Th.-F. May 3-4 02:05-02:40UT y S8T5(gml; some cloud) ne; 18x50 IS b
ne: stars of spring in the S.; Saturn well up in the W.; Venus about 15° above the NW horizon.
18x50 IS b: area near T Cor Bor, but the star not seen for sure, M13, M92, M65, M66, M44, M67, Saturn, R Leonis and area near it, 'Head of Hydra' area.

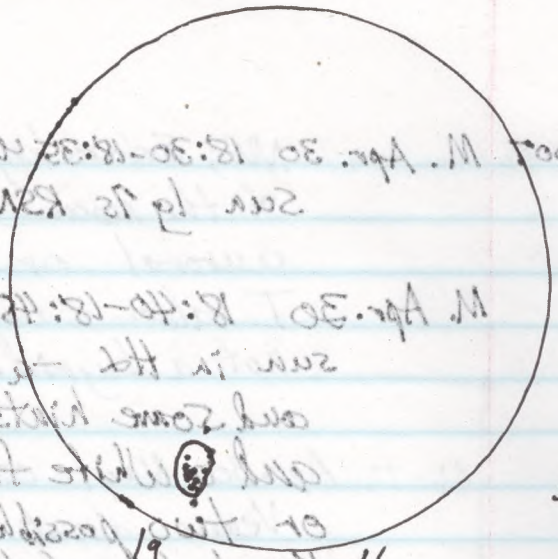
9



SC

lg
95
RSN19

May 3
17:25-17:30UT

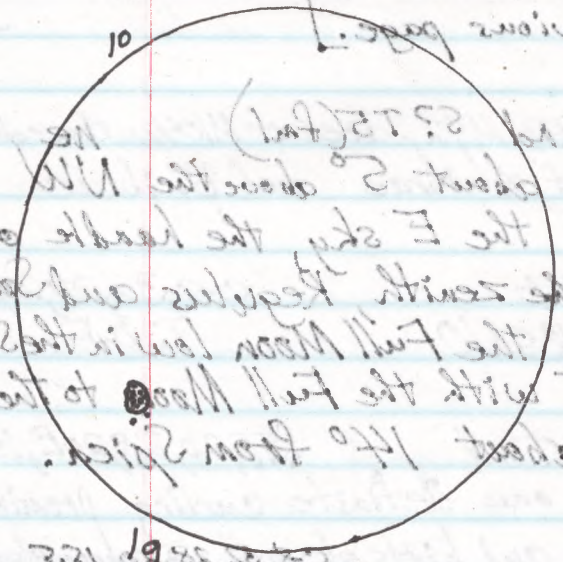


SC

lg
95
RSN19

May 4
18:05-18:10UT

10



SC

lg
95
RSN20

May 5
1700-17:05UT

2007 W. May 3 17:25-17:30 UT t C-8, 32, 28, 20, 15.5
sun lg 9s RSN 19

W. May 3 17:35-17:40 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of prominences along the southern limb

F. May 4 18:05-18:10 UT t C-8, 32, 28, 20, 15.5
sun lg 9s RSN 19

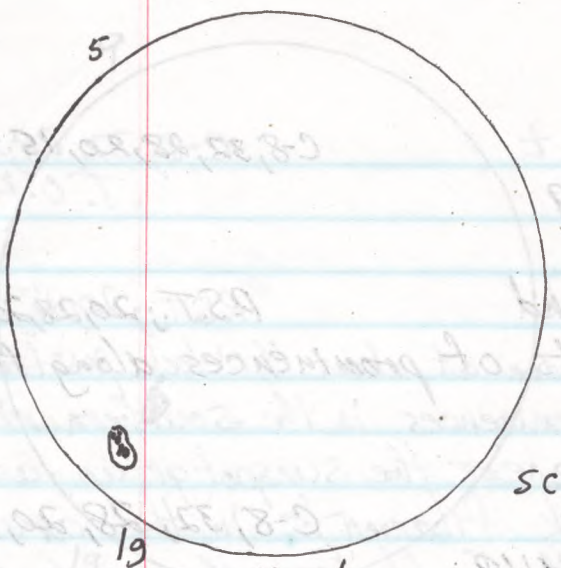
F. May 4 18:15-18:20 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of prominences near the 4 to 5 o'clock position.

F.-S. May 4-5 03:40-04:00 UT nd 55T5(gm) ne
- Venus very low in the NNW; Big Dipper near the zenith; Saturn in the W; brightness from the gibbous moon that had risen in the SE; Vega in the E; a possible glow in the N that may possibly have been auroral.

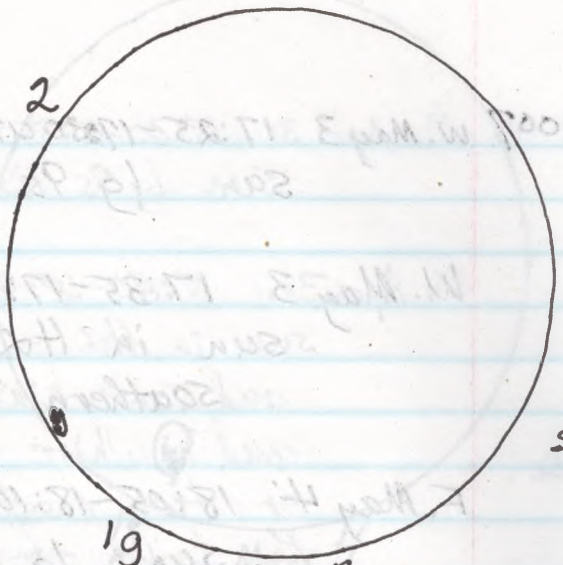
Sa. May 5 17:00-17:05 UT t C-8, 32, 28, 20, 15.5
sun lg 10s RSN 20 T.O.F.

Sa. May 5 17:05-17:10 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα. hints of prominences along the southern rim of the solar disk.

S.-S. May 5-6 03:20-04:15 UT y 58T9.5(!) ne; 18X50Sb
ne: stars of spring; Venus brilliant and very low in the NNW; Saturn well up in the W; Jupiter in the SE at the end of the session, 2 bright meteors.
18X50Sb: M10, M12, M5, M13, M92, M57, M51, M101, areas of Virgo, areas of Corvus, M65, M66, M81, M82,



May 6
17:25-17:30 UT



May 7

2007 Kemble's Cascade, Kemble 2, Saturn, M44, M67, R Leonis and the area near it.

Su. May 6 17:25-17:30 UT t — C-8, 32, 28, 20, 15.5
sun lg 5s RSN15 — T. O.F.

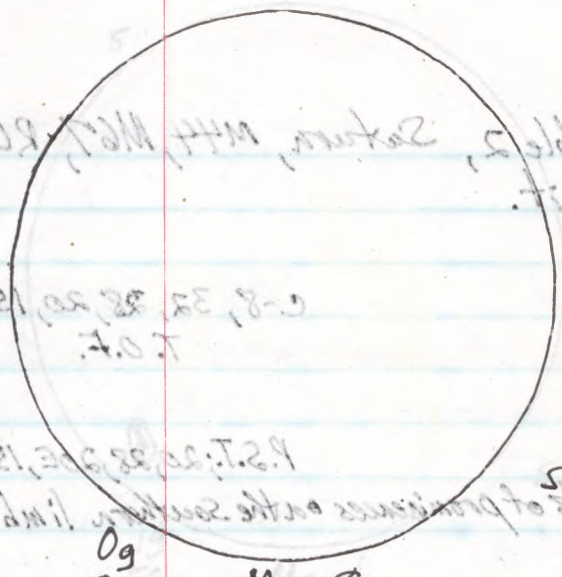
Su. May 6 17:30-17:35 UT nd — P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of prominences on the southern limb

Su.-M. May 6-7 02:55-04:00 UT y SFT9 — ne; 18X50ISb.
ne: stars of spring; Venus brilliant and low in the NW early in the session; Jupiter low in the SE near the end of the session
18X50ISb: M5, M13, M92, M57, areas of Virgo and Leo, M65, M66, M44, M67, R Leonis and nearby area, Saturn, IC4665, Taurus Poutiowski and area, Barnard's Star.

M. May 7 16:55-17:00 UT t — C-8, 32, 28, 20, 15.5
sun lg 2s RSN12 — T. O.F.

M. May 7 17:05-17:10 UT nd — P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only slight hints of prominences in various places.

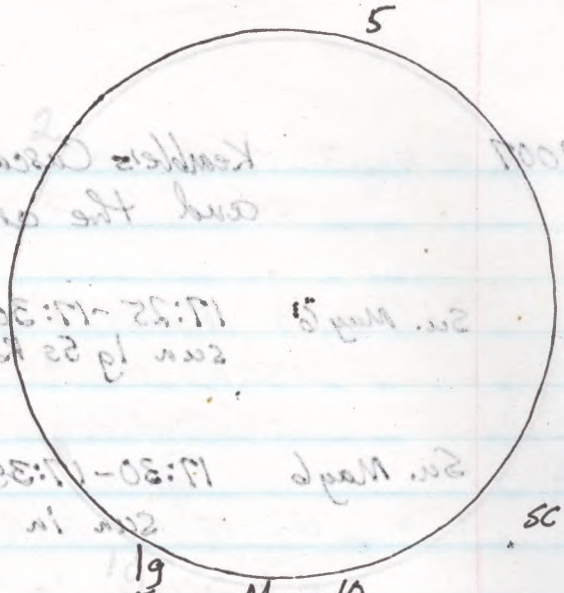
M.-T. May 7-8 02:55-03:05 UT nd SFT3 (clouds) — ne; 18X50ISb
ne: Amid the scattered clouds I saw some stars in the NW at first and later near the zenith and in the E. Venus at first was seen near the NW horizon and later Saturn well up in the W.
18X50ISb: I searched near the star β Draconis for Comet C/2007 E2 (Lovejoy) since its ephemeris stated it should be there at mag. 8.4, but I did not knowingly see it.



0g
OS
RSNO

May 8
17:20-17:25

SC



1g
5S
RSN15

May 10
18:35-18:40UT

SC

2007 Tu. May 8 17:20-17:25 UT t C,8,32
sun 6g 0s RSN0 T.O.F.

Tu. May 8 17:25-17:30 UT nd P.S.T.; 20
sun in Hα - only some hints of prominences.

W.-Th. May 9-10 01:40-02:20 UT Gould Lake S:T 5 (cloud) ne
After leading a tour of the Hollefored Crater for Dieter Brueckner's group of high-school students, I drove to Gould Lake to join them for snack and short observing session. Clouds were a problem for the observing. However, the students tried to observe with about 5 "Stargazer Steve" reflectors. I observed naked-eye Venus and some of the stars of spring and could point out Saturn, Regulas, γ Leonis, M44, Mizar, and the position of R Leonis.

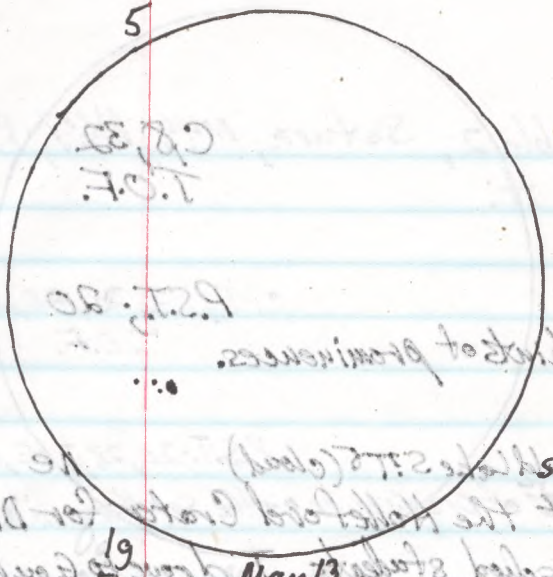
Th. May 10 18:35-18:40 UT t C8, 32, 28, 20, 15.5
sun 1g 5s RSN15 T.O.F.

Tu. May 10 18:40-18:45 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only hints of prominences

Th.-F. May 10-11 03:00-03:30 UT γ S6 T6 (haze) ne; 18x50 15b
ne: stars of spring; Saturn in the W.
18x50 15b: M104 and area, R Cor Bor and area, area of T Cor Bor, Alcor and Mizar and area, M44, R Leonis and area, Saturn

F.-S. May 11-12 06:00-06:10 UT nd S:T 9.5! ne; 18x50 15b
ne: After returning home following the Kingston Centre meeting and watching tv for a while, I observed briefly seeing the late spring and early summer stars.

5



19
55
RGN15

May 13
17:20-17:25UT

2007

18x50156: NGC 7789 in Cassiopeia, M10 and M12 in Ophiuchus.

Su. May 13 17:20-17:25 UT t. scum lg 5s RSN15 C-8, 32, 28, 20, 15.5 T.O.F.

Su. May 13 17:25-17:30 UT nd scum in Hz. some hints of prominences P.S.T.; 20, 28, 20E, 15.5

S.-M. May 13-14 01:45-05:00 UT+ 00 STT9-9.5 ne; 20x100b; C-14, 19

ne: stars of spring and early summer; Venus in the NW in about the first half of the session; Jupiter in the SE in the latter part of the session, a bright meteor in the S.

Comet Lovejoy

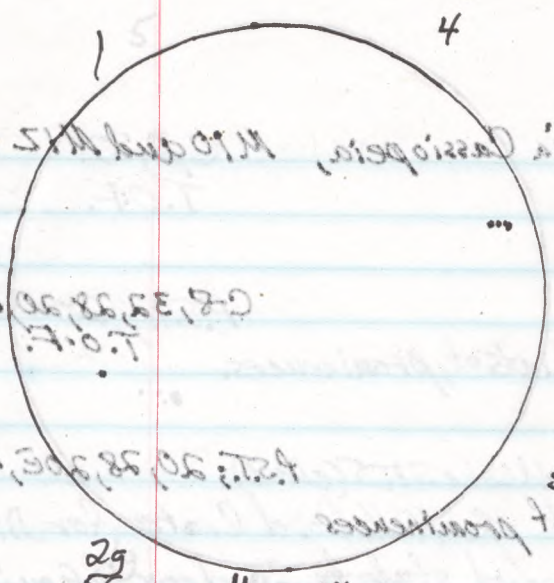
20x100b: MS, T Cor Bor, ζ Cor Bor, M13, M92, Comet C/2007 E2 (Lovejoy) in Draco at about mag. 9.0 at R.A.: 16h 26m 15; Dec.: +59° 27.1 - fainter and smaller than I expected it to be. It was about 1° E. of AT Draconis, a bit W. of NGC 6176, and about 2° SSE of η Draconis (See U51.), also M57; I also inspected the area E of Regulus with a possible view to observing an occultation in that area later in the week. I observed

L82
L196

2 Levy List objects: L82 (NGC 5634) a small globular cluster in Virgo which seemed to be overpowered by a nearby star and L196 (NGC 5694) a globular known as Tombaugh's Cluster in Hydra, which was seen faintly. (See U287 and U332.) Jupiter and 4 moons were observed, as well as M4, Barnard's Star and its area, and IC4665.

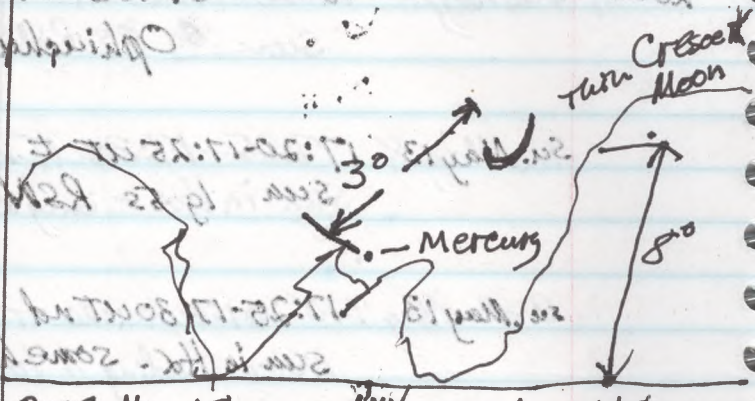
C-14, 19: In the early part of the session, I observed Venus at, or near, dichotomy, and Saturn and four of its many moons.

Venus at dichotomy

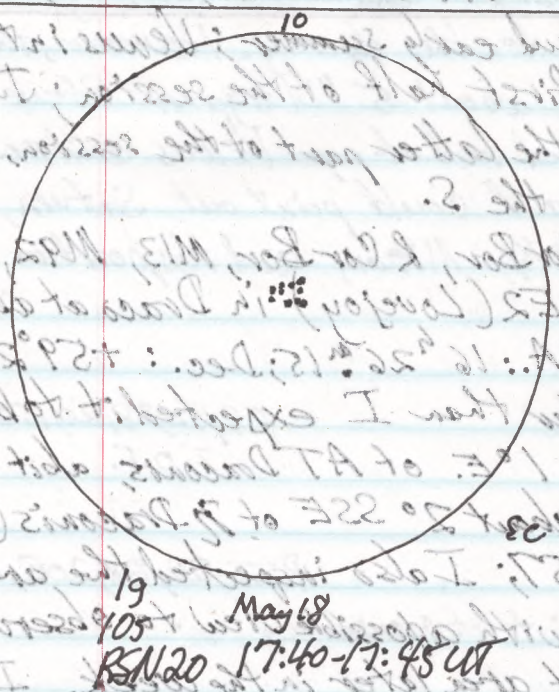


Venus

Moon-Mercury Conjunction
(listed as occurring at 0h UT.)
(.5 hr earlier)



2007, May 18 01:30 UT: 30 hour old Crescent Moon and Mercury 3° away



2007 M. May 14 17:00-17:05 UT t C-8, 32, 28, 20, 15.5
Sun 2g 6s RSN25 T. O.F.

M. May 14 17:05-17:10 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - numerous "hints of prominences" around the disk

Th.-F. May 17-18 01:30-01:40 UT nd twl ne; 18x50 15b
ne: In twilight I observed the beautiful very slender crescent moon 30 hours old about 8° above the NW horizon with Mercury about 3° to the left and down from it. Mercury was seen at first only with difficulty and after being seen in the binoculars first, but later I had no doubt that I saw Mercury. Vega was seen in the E., the Big Dipper near the zenith, Arcturus and Spica in the S, and Regulus and Saturn high in the W. Venus was very brilliant in the WNW. (See diagram.

30-hour Moon
Mercury

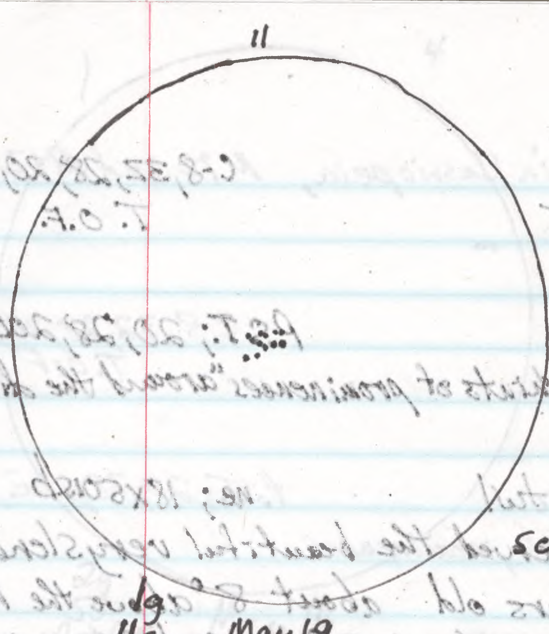
18x50 15b: Very slim crescent moon, Mercury about 3° from the moon. Mercury was seen first in binoculars in the fairly bright twilight.

05:10-05:40 UT nd S7-8T9 ne; 18x50 15b
ne: stars of late spring and early summer.
18x50 15b: M65, M66, areas of Cygnus, NGC 7789, Kemble's Cascade, M27, β Cygni.

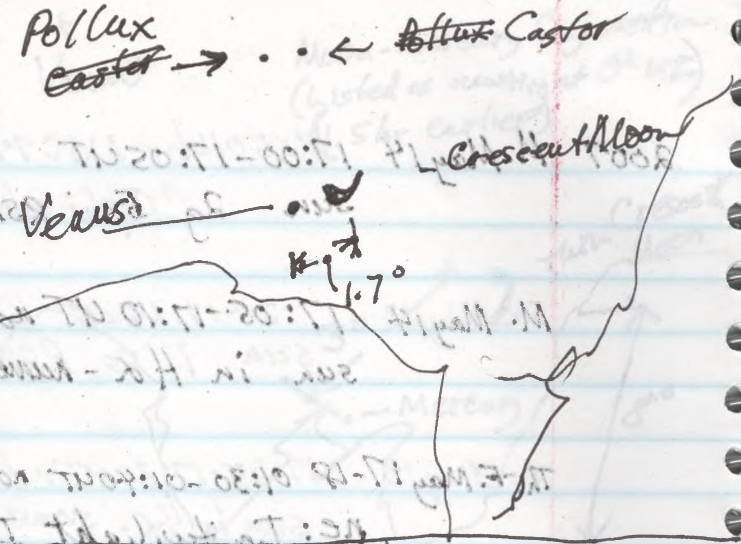
F. May 18 17:40-17:45 UT t C-8, 32, 28, 20, 15.5
Sun 1g 10s RSN20 T. O.F.

F. May 18 17:45-17:50 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - one definite short sharp prominence at the bottom of the solar disk and perhaps other "hints" of prominences

F.-S. May 18-19 02:00-05:15 UT 00 S7T9 ne; 20x100b; C-14, 32.
ne: stars of spring and early summer, Venus brilliant in the



11s KSN21 May 19 17:15-17:20 UT



2007, May 19-20 01:55 UT Spectacular Moon-Venus Conjunction

2007 W. in the early part of the session, Crescent moon which set at about 03:28UT; Jupiter which rose at about 03:30UT, one bright meteor, an extremely brilliant flash from a "polar orbit" satellite.

20x100b: area of μ, ϵ, and κ Leonis in order to prepare possibly for an asteroidal occultation which was predicted for the coming week, M10, M12, Levy 220 (NGC 6910) an open cluster near γ Cygni; Levy 6 (NGC 6229) a small globular cluster in Hercules forming a small almost isosceles triangle with two nearby stars (U.80); tried to observe Levy 334 and Levy 271 but found them difficult. Both are globular clusters. The first one may have been fainter than expected and the second one may have been difficult to see because of the proximity of Jupiter which was very bright. NGC 6284, a globular cluster in Oph about 2° almost due south of Levy 271 (NGC 6342), was seen faintly, M9, Jupiter and 3 of its moons.

Levy220

Levy 6

NGC 6284

M9

C-14,32: In the early part of the observing session, I observed Venus, near dichotomy in its phase, and Saturn and 3 of its moons.

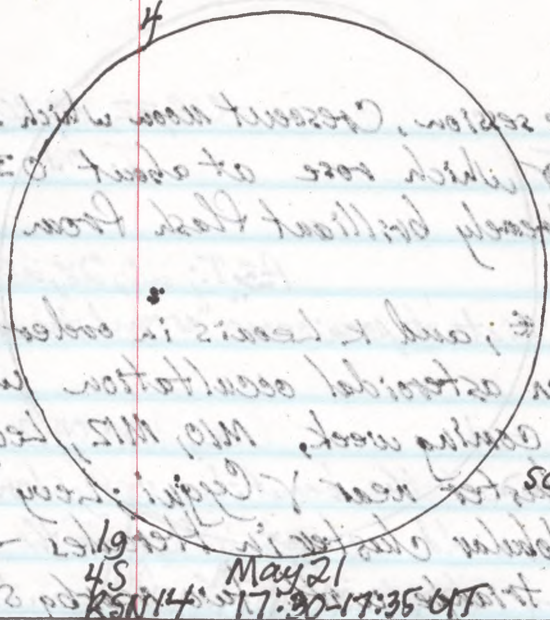
Sa. May 19 17:15-17:20UT t C-8, 32, 28, 20, 15.5
Sun lg 11s RSN21

Sa. May 19 17:25-17:30UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - one definite prominence at the bottom of the disk and other "hints of prominences elsewhere.

Sa.-Su. May 19-20 01:50-01:55UT nd twl ne

Moon-Venus Conjunction!

During twilight I observed the spectacular conjunction of the Crescent Moon and Venus, listed as being 1.7° apart and at 01hr. UT. (See diagram.) They were about 25° above the NW horizon and about 8° down from Castor and Pollux. The moon was about 3½ days old.


4
SC
1g
4S
May21
KSN14"
17:30-17:35 UT

2007 03:30–04:15 UT y S7T8→6 (haze) ne; 18x50IS b

ne: stars of late spring and summer, Moon and Venus setting in NW at beginning of session, Saturn in the W, Jupiter rising in the SE.

18x50ISb: M10, M12, M5, M27, M57, M51, IC 4665, Barnard's Star and area, M4, M80, M13, M92, β Cygni, area of η Virginis.

S.-M. May 20-21 01:47–01:48 UT nd twl ne

For about 1 minute I observed Mercury which was quite bright but very low above the NW horizon. There was a clear area of sky in the NW, even though about 90% or more of the sky was cloudy.

Mercury (1)

M. May 21 17:30–17:35 UT t C-8, 32, 28, 20, 15.5

sun lg 4s RSN14 T.O.F.

M. May 21 17:40–17:45 UT P.S.T.; 20, 28, 20E, 15.5

sun in Hα – some hints of solar prominences in various places around the southern half of the solar disk.

M.-T. May 21-22 01:30–01:35 UT nd mid-twl ne

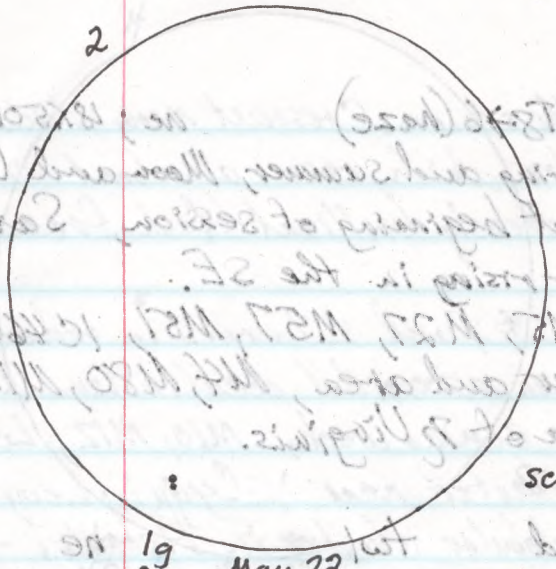
I observed Mercury, easily seen about 10° above the horizon in the NW, in a clear opening among the trees. Saturn was in the W about 50° above the horizon with Regulus about 10° to its left and the crescent moon about 10° to its right. Brilliant Venus was in the NW about midway between Saturn and Mercury and about 35° above the horizon.

twilight view: Saturn; Cr. Moon, Venus, Mercury / (2)-consec.

03:30–04:40 UT y S8(?)T8 (calm) ne; 18x50ISb

ne: Crescent moon in the NW; Jupiter in the SE, stars of late spring and early summer.

2

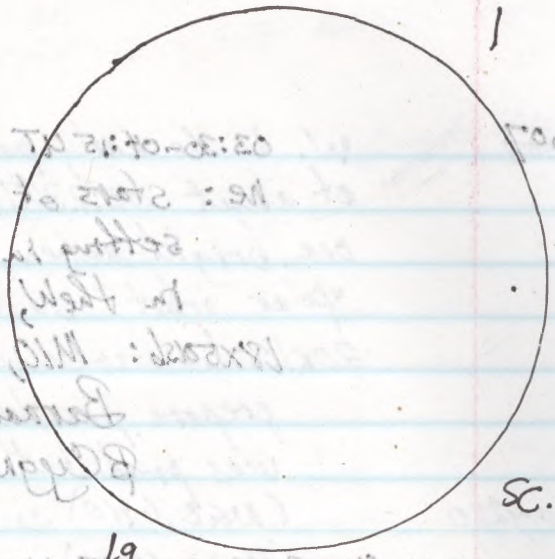


SC

lg
25
RSN12

May 22

1



SC.

lg
15
RSN11

May 23
1655 - 17:00 UT

2007 18X50156: M5, M10, M12, M14, area of Barnard's Star and the star itself, M27, M57, M11, M23, M4, M80, Jupiter and 3 of its moons. RCorBor, TCorBor

Tu. May 22 19:50-19:55 UT t C-8,32,28,20,15.5
Sun lg 2s RSN12 T.O.F.

Tu. May 22 20:00-20:05 UT nd P.S.T.; 20,28,20E,15.5
Sun in Hα - one definite prominence at the bottom of the disk and hints of others at other places.

Tu.-W. May 22-23 01:31-01:57 UT nd twl ne; 18X50156
ne: With the sky about 80% or more overcast, I observed the "almost First Quarter Moon" in the W, and brilliant Venus in the WNW amid the clouds or under a layer of cloud and in a good opening in the NW I looked for Mercury but was not sure of seeing it, though it is possible I may have glimpsed it momentarily.
Moon, Venus
18X50156: Crescent moon, actually only about 19 hours before First Quarter - at 21:03 UT; Venus; Mercury, easily seen for over 20 minutes between about 10° and 6° above the NW horizon
Mercury
(3) Consec.

W. May 23 16:55-17:00 UT t C-8,32,28,20,15.5
Sun lg 1s RSN11 very tiny spot seen with diligence (new group) T.O.F.

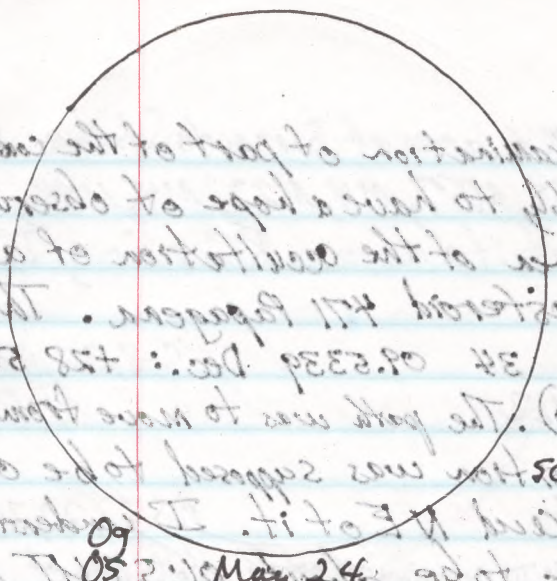
W. May 23 17:05-17:10 UT nd P.S.T.; 20,28,20E,15.5
Sun in Hα - hints of small prominences in several places

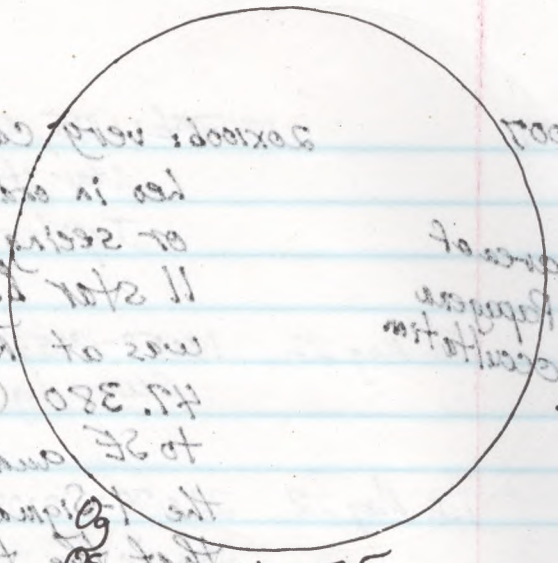
C-14,32,88
W.-Th. May 23-24 01:40-04:10 UT 00 S(?)T7 (fq,ml) ne; 18X50156; 20X00b; ∧
ne: Stars of Spring; Venus, Saturn, Jupiter.
18X50156: Saturn, areas of the W. sky

2007 20x1006: very careful examination of part of the constellation Leo in order possibly to have a hope of observing or seeing the area of the occultation of a mag. 11 star by the asteroid 471 Papagena. The star was at R.A.: 09 34 09.5339 Dec.: +28 56 47.380 (2000.0). The path was to move from NW to SE and my position was supposed to be outside the 1-Sigma line and NE of it. I understood that the time was to be about 01:57 UT and the star might drop by 1.7 mag to 12.4 (the mag. of the asteroid) for at most 5.5 seconds. Several facts made the observation very challenging: (1) it was only mid-twilight, with end of astronomical twilight not for about another 56 minutes – at 02:53 UT; (2) The moon was past First Quarter by about 5 hours (F.Q. was at 21h 03m UT on May 23; (3) The bright moon was only about 10° SE of the star; (4) the magnitude of the star was such that I could not be sure of seeing it at all in the large binoculars; (5) In twilight there would likely be too few stars visible to use the finder of the C-14 to "star-hope" to the right location to use that telescope. I was able to "star hop" from α to γ + δ Leonis and then to μ, 29, and ε Leonis and then to 13 Leonis and then to star at about 9h 33m; Dec. +28° 20° (See U144 and U143.) I was able to see the star marked N of that one on U143, but not the one slightly to the WNW of it – unmarked on Uranometria, but marked on MSA – which was supposed to be the occulted star. I had tried but not succeeded in seeing the "occulted star" according to predictions, but when I considered the difficulties, I had not expected to

area of Papagena occultation

– difficulties, as expected, in seeing the star.


Og
05
RSNO
May 24
17:20-17:25UT
SC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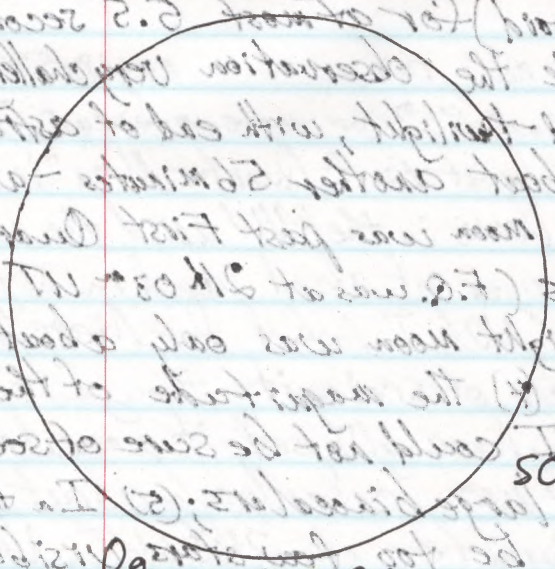
05
RSNO
May 25
17:30-17:35UT
SC


Og
05
RSNO
May 26
17:35-17:40UT
SC

2007

see the event.
I also observed areas of Scorpius and Jupiter with all 4 of the Galilean moons on the same side of the planet.
C-14, 32, 8.8: Venus near dichotomy; lunar craters along the terminator - observed with the 8.8mm Series 4000 Meade eyepiece - giving 444.3X and excellent views of the lunar craters.

Th. May 24 17:20-17:25 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSN O T.O.F.

Th. May 24 17:25-17:30 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - some hints of prominences

F. May 25 17:25-17:30 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

F. May 25 17:30-17:35 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - some hints of prominences around the disk

F.-S. May 25-26 01:46-01:50 nd twl ne; 18x50 sb
ne: During twilight I very easily saw Mercury about 10° above the NW horizon. I also saw Venus in the WNW and the gibbous moon in the WSW to W sky
Mercury
18x50 sb: Mercury, Venus, the Moon.

Sa. May 26 17:35-17:40 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Sa. May 26 17:45-17:50 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences at various places on disk.

Sa-Su May 26-27 01:36-01:46 UT nd twl ne: 18x50 sb
ne: Venus brilliant in the NW; Regulus and Saturn high in

1

May 29
17:20-17:25UT

2007 the W; gibbous moon in the SW; Vega in the E.; Mercury
18X50ISb: Venus, Saturn and Regulus, gibbous moon with the crater Plato beautifully situated on the terminator; Mercury seen immediately with the binoculars, though it was not until near the end of the short twilight session that I was sure of seeing Mercury naked-eye

Mercury.

03:10-03:40UT y 5.75-4 (gml; increasing cloud) ne; 18X50ISb
ne: stars of late spring, at least some bright ones such as Deneb, Vega; Altaires, Arcturus, Spica; and the bright gibbous moon in Virgo; one meteor
18X50ISb: some stars of Lyra and Cygnus and Scorpius; M80

M.-T. May 28-29 01:44-01:49UT nd twl ne; 18X50ISb
ne: Mercury easily seen about 10° above the NW horizon, Venus in the WNW; gibbous moon in the SSE, but considerable cloud in most parts of the sky.
18X50ISb: Mercury, Venus, gibbous moon.

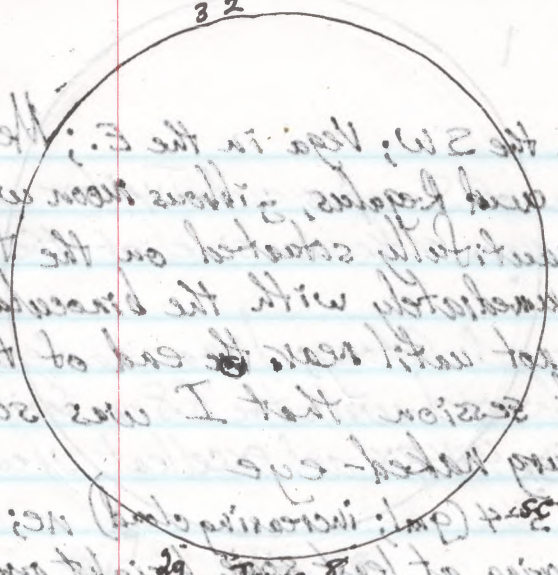
Mercury

Tu. May 29 17:20-17:25 UT t C-8, 32, 28, 20, 15.5
Sun lg ls RSN II T.O.F.

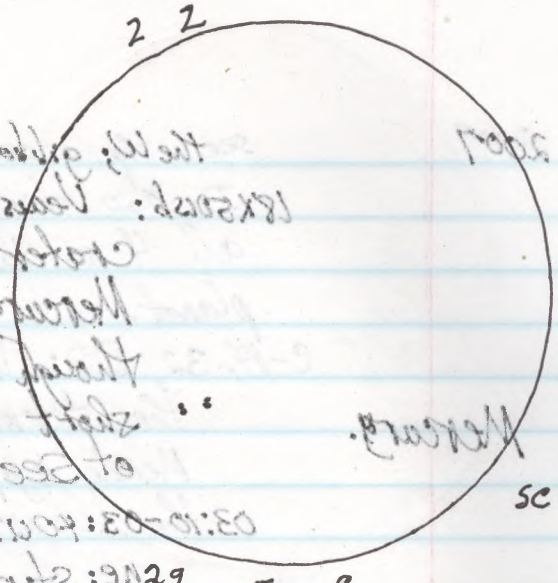
Tu. May 29 17:25-17:30 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - one definite prominence on the bottom and other "hints of prominences

Tu.-W. May 29-30 01:44-01:49UT nd twl ne; 18X50ISb
ne: In twilight I observed brilliant Venus in the NW, Regulus and Saturn about 10° apart in the W, and Mercury in the NNW though Mercury was not seen at first, but within a couple of minutes it could be

Mercury



29
55
RSN25 June 8 17:25-17:30UT



29
45
RSN24 June 9 17:45-17:50UT

2007

be seen fairly easily.
18X50I5b: Saturn and Regulus, Venus, Mercury.
04:20-04:35UT nd S(?)TF(gml) ne
With a very bright gibbous moon in the S, I observed for a short while seeing the Big Dipper, Polaris, Kochab, Deneb and Vega, Arcturus and Spica
18X50I5b: a few stars in the NW and some of the stars in Cygnus.

Th.-F. June 7-8 04:10-05:00UT y S7-8T7 (somehaze) ne; 18X50I5b
ne: Jupiter in Scorpius in S.; stars of summer.
18X50I5b: M5, M10, M12, M14, Barnard's Star and area, M107 area of Vesta which was not too far from M107, M4, M80, M28, M22, M20, M8, M21, M23, M24, M25, M11, M26, M27, M57, M39, M16, M17, M18, Col 299, Jupiter and its four Galilean moons.
23 Messier objects

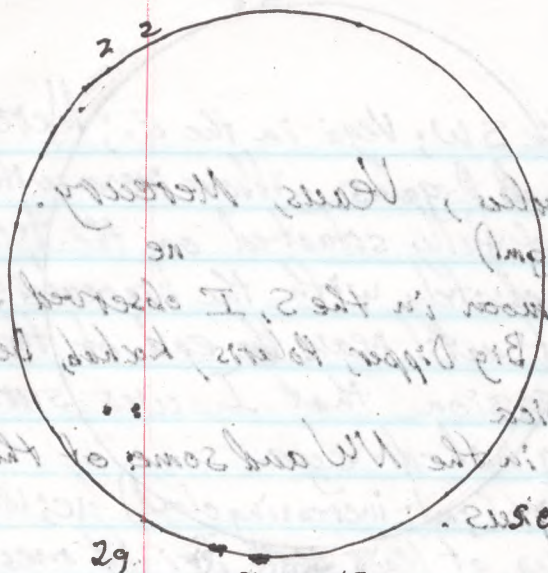
F. June 8 17:25-17:30UT t C-8, 32, 28, 20, 15.5
Sun 2g 5s RSN25 T. O.F.

F. June 8 17:35-17:40UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences in several places

Sa. June 9 17:45-17:50UT t C-8, 32, 28, 20, 15.5
Sun 2g 4s RSN24 T. O.F.

Sa June 9 17:50-17:55UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα. some "hints" of prominences

Sa.-Su. June 9-10 03:45-05:25UT y S8T9 (very good) ne; 18X50I5b
ne: Stars of late spring and summer; Venus and Saturn in the W. earlier in the evening. Late in the session I saw a shadow from Jupiter
shadow from Jupiter!



29
45
RSNOH

June 10
17:20-17:25 UT

2007 which was very bright in the South. I held out my arm and saw its shadow on the side of the observatory.

18X50156: M11, M26, M16, M17, M18, M22, M28, M9, M23, M24, M25, M8, M20, M21, M4, M80, M10, M12, M15, IC4665, Barnard's Star, RCorBor, TCorBor, M57, M27, M39, NGC6633 in Ophiuchus, the asteroid Vesta located SW from M107, M107, area of Pluto which is located in Sagittarius about 3° ESE of the star ε Serpentis. (See U.293.), Jupiter and its 4 Galilean moons.

Vesta

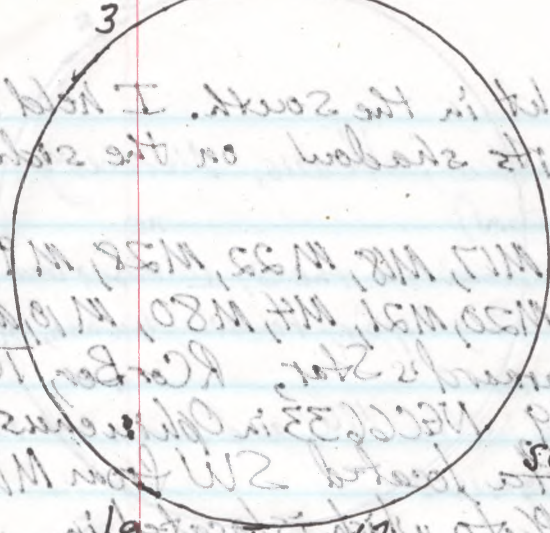
area of Pluto

Su. June10 17:20-17:25 UT t C-8, 32, 28, 20, 15.5
sun 2g 4s RSN 24 T.O.F.

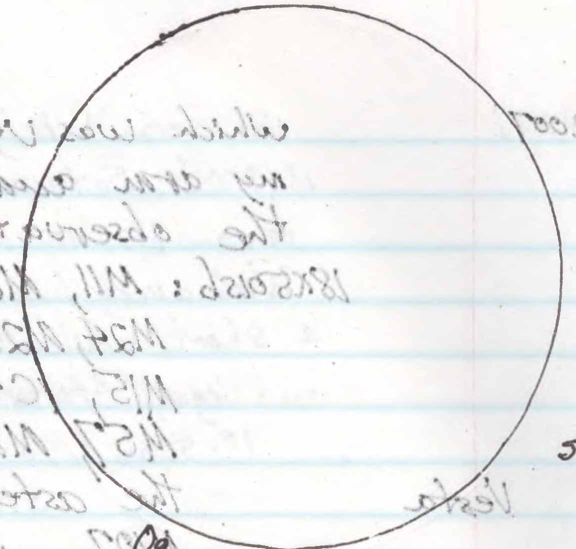
Sa. June10 17:30-17:35 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hdc - some "hints" of prominences - small ones

S.-M. June10-11 02:30-04:40 UT y S879 ne; 18X50156; 20X1006
ne: stars of late spring and summer; Venus and Saturn in the W.; later Jupiter in the S.. At about 04:15 UT there was a possible pass of the International Space Station in the N. sky
18X50156: Saturn in the W.; various areas of the sky
20X1006: M5, M107 and the area of the asteroid Vesta, as well as Vesta which had moved slightly Westward from the previous night, area of the planet Pluto, Jupiter and 3 of its Galilean moons (though one may not have been seen because of proximity to another of the moons.) M4, M80, M19, M62, M9, M11 and RScuti, M16, M17, M18, M23, M24, M25, M8, M20, M21, NGC 6633, M10, M12, M14, NGC 7789,

Vesta



1g 3s June 12
RSN13 18:25-18:30UT



0g 0s June 13
RSN20 17:15-17:20UT

2007 Kemble's Cascade.

M.-T. June 11-12 02:50-03:25UT y twl + S8T7-8 (some cloud) ne; 18X50ISb
ne: Jupiter in the S.; stars of summer.
Vesta 18X50ISb: M107, Vesta, area of Pluto about 3° ESE of the star ξ Serpentis, Jupiter and 3 of the Galilean moons, R Cor Bor and T Cor Bor, ε Lyrae and M57, β Cyg, M13, M92, M4, M80, β Librae.

Tu. June 12 18:25-18:30 UT t C-8, 32, 28, 20, 15.5
sun 1g 3s RSN13 T.O.F.

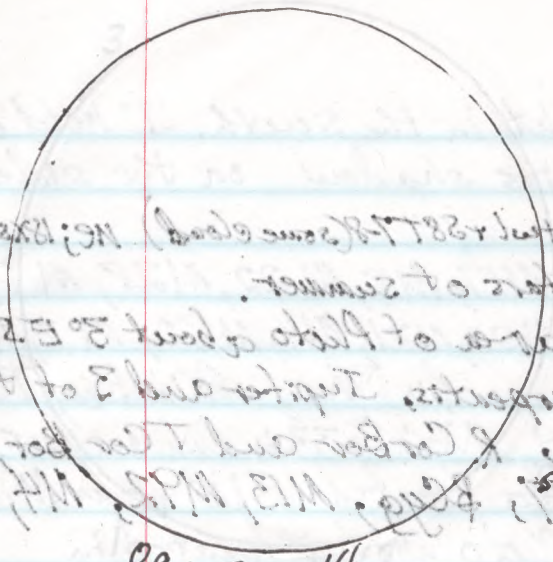
Tu. June 12 18:35-18:40UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - a few slight "hints" of prominences

T.-W. June 12-13 03:45-04:20UT y S?T5-3 (increasing cloud) ne; 18X50ISb
ne: Jupiter in the S; stars of summer
18X50ISb: M10, M12, M4, M80, R Cor Bor, T Cor Bor, M13, M17, M18, M20, M21, M23, M24, M25, area of Pluto, M9, M19, M62, M51, Alcor and Mizar, M5,
Vesta M107, the asteroid Vesta

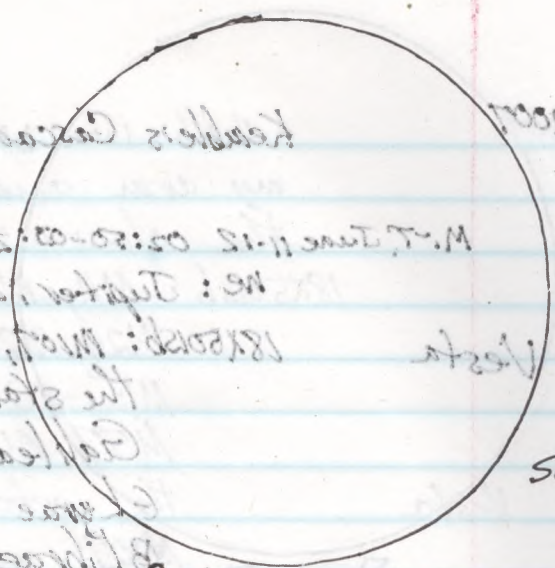
W. June 13 17:15-17:20UT ss C-8, 32, 28, 20, 15.5.
sun 0g 0s RSN0 T.O.F

W. June 13 17:20-17:25UT y P.S.T.; 20, 28, 20E, 15.5
sun in Hα - no obvious prominences seen with only possible "hints" of such.

W.-Th. June 13-14 03:45-05:00UT y (S9; T9) ne; 18X50ISb
ne: On a night of excellent seeing and excellent transparency, I enjoyed the views of the summer sky with Jupiter
18X50ISb: M11 and R Scuti area, M26, M16, M17, M18, M23,



June 14
20:10-20:15UT



June 15
17:50-17:55UT

2007 M24, M25, M22, M28, M8, M20, M21, M10, M12, M14, M9, M107 and nearby Vesta, M5, M15, M81, M82, M57, M27, M51, Alcor and Mizar, Cor Caroli, M4, M80, M13, M92, Col 299.

Vesta -29 Messier objects

Th. June 14 20:10-20:15 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

Th. June 14 20:15-20:20 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only faint hints of small prominences

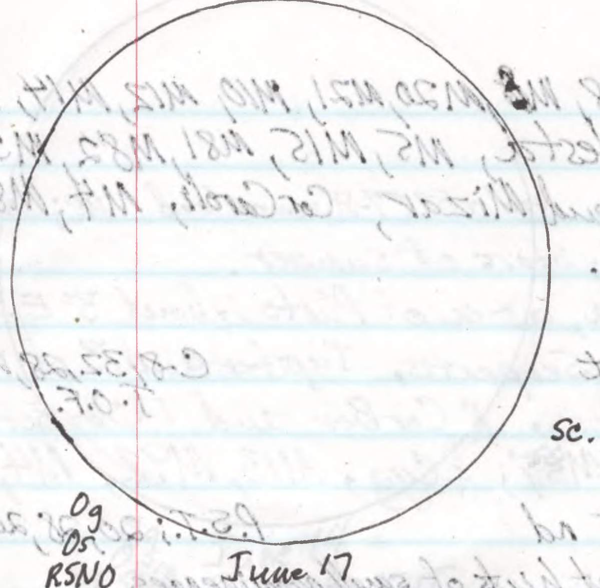
Th.-F. June 14-15 04:05-05:25 UT y (5.8-9.7?) ne; 18X50sb
ne: stars of summer; Jup: ter brilliant in the S.; one or two or more meteors.

Vesta 18X50sb: M9, M107 and nearby Vesta, M10, M12, M14, M11 and R Scuti and area, M5, M15, M16, M17, M18, M19, M62, area of Pluto SE of the star ε Serpentis, M23, M24, M25, M22, M28, M8, M20, M21, R CorBor and T CorBor, β Cygni, M57, M27, Col 299, M71, M81 and M82, Kemble's Cascade, Kemble 2, Barnard's Star, NGC 6633, NGC 7789, deep sky objects in Cassiopeia possibly including M103.

F. June 15 17:50-17:55 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

F. June 15 17:55-18:00 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only "hints" of prominences at bottom of disk.

Sa.-Su. June 16-17 01:00-03:45 UT 00 5 T 0-6 varied ae; 20X100b
ne: After having a gathering of various members of the Kingston Centre for a barbecue and planned observing session, the weather proved to be not too good. Some people arrived around 3:00 p.m. E.D.T and we had a


Sc.
Og
Os
RSNO
June 17

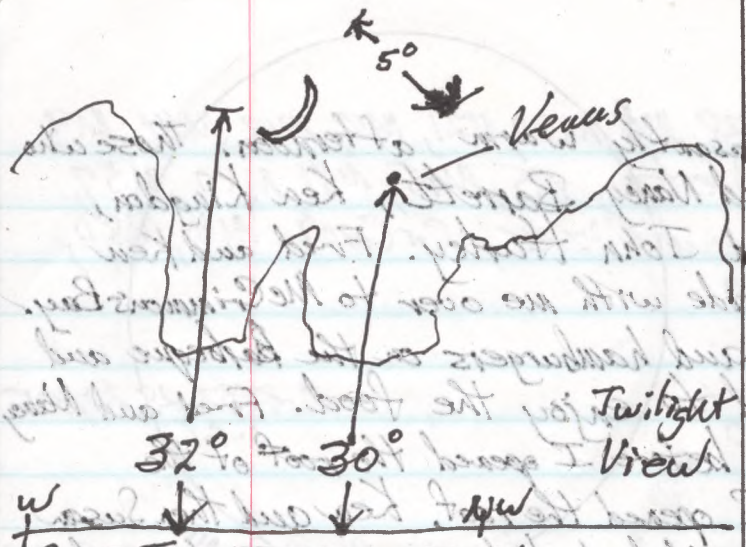
2007 good visit on a pleasantly warm afternoon. Those who came were Fred and Nancy Barrett, Ken Kingdon, Susan Gagnon, and John Hurley. Fred and Ken went for a boat ride with me over to McCrimmons Bay. I cooked hot dogs and hamburgers on the Barbeque and the guests appeared to enjoy the food. Fred and Nancy left and John left before I opened the roof of the observatory. After I opened the roof, Ken and then Susan left since the weather did not look promising. I observed alone from about 02:10 UT to about 03:45 UT. By 03:10 the skies had at least partly cleared and for a while after that they remained partly clear, but later again clouded up. However, I did see many of the stars of summer and also Jupiter in the South.
20x100b: Jupiter and 3 of its Galilean moons.

Su. June 17 18:05-18:10 UT t C-8, 32, 28, 20, 15.5
sun 0g 0s RSNO T.O.F.

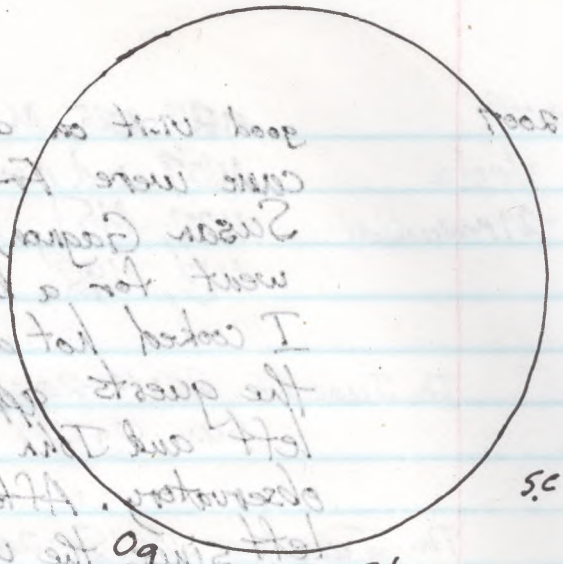
Su. June 18 18:10-18:15 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hℒ - only some "hints" of prominences

S.-M. June 18-19 02:50-03:50 UT y (twl+58T9) ne; 18X50156
ne: stars of summer; Crescent Moon, Venus and Saturn in the W. in the early part of the session.
Vesta 18X50156: Jupiter and 4 moons, M107, Vesta, M9, M19, M62, area of Pluto, M11 and R Scuti, M16, M17, M18, M25, M26, M71, M5, M27, M57, M51, M101, M81, M82, TCorBor, RCorBor, Col 299, Kemble's Cascade, Kemble 2, NGC 7789, Barnard's Star and area, IC 4665, NGC 6633, U and EU Del.

M-T. June 18-19 01:30-01:35 UT nd twl ne
In twilight I saw the Crescent Moon and Venus



2007 June 19 01:30 UT: Stunning View of the Crescent Moon and Venus.



June 21
20:10-20:15 UT

5c.

2007 in the WNW only 5 degrees apart. (See diagram)
03:45-04:35 UT y S8 T6-7 (haze) ne; 18X50B6
ne: stars of summer
Vesta 18X50B6: M107, Vesta, M9, M23, M24, M25, M22, M28, M8, M20, M21, M11 and R Scuti, M26, M16, M17, M18, M4, M80, Jupiter and 3 of its moons, M27, Col 299, M57, B Cyg, M13, M92, T Cor Bor, R Cor Bor, IC 4665, Barnard's Star and area nearby, NGC6633, M71.

20X100b; C-14,55

W.-Th. June 20-21 03:40-05:50 UT oo S8?T8-9.5 (varied) ne; 18X50B6;
ne: stars of summer; Jupiter in S.; earlier Venus had been seen; Crescent moon was up in early part of the session.
18X50B6: M4, M107 and Vesta, M9, area of Pluto; M23, M24, M25, M11 and R Scuti area; M16, M17, M18, M26, U and E U Del, B Cyg, M27, M57, Col 299, T Cor Bor,
20X100b: M107, Vesta, M9, M22, Jupiter and 3 moons, M19, M62, M80, T Cor Bor, R Cor Bor.
C-14,55: M57, a slight attempt to locate the area of Pluto

Because I thought that T Cor Bor might have had a slight increase in brightness, I phoned David Levy and said it might have shown a ±-magnitude increase in brightness, but I was not sure if it might be a fluctuation or a significant beginning of an outburst.

Th. June 21 20:10-20:15 UT t C-8, 32, 28, 20, 15.5
sun Og oo RSNO

Th. June 20 20:15-20:20 UT nd P.ST.; 20, 28, 20E, 15.5
sun in Ha - hints of prominences on bottom edge.

June 22

RSNO 17:25–17:30 UT

2007 Th.-F. June 21-22 04:00 - 05:25 UT y 59T 9-9.5(1) ne; 18X50156
ne: stars of winter; Jupiter in the S.; Crescent Moon not yet set in W. at beginning of session.

Vesta 18X50156: M107 and Vesta, M101, M51, M9, M19, M62, area of Pluto, M4, M80, M6, M7, M16, M17, M18, M22, M23, M24, M25, M28, M11 and R Scuti area, NGC 6633, IC4665, Barnard's Star and area, M10, M12, M14, M5, M15, T CorBor which did not seem slightly brighter than usual as it had the previous night, R Cor Bor, M13, M92, M57, M27, β Cyg, Col 299, M27, M81, M82, Kemble's Cascade, Kemble 2, M31, M32, M110.

34 Messier Objects

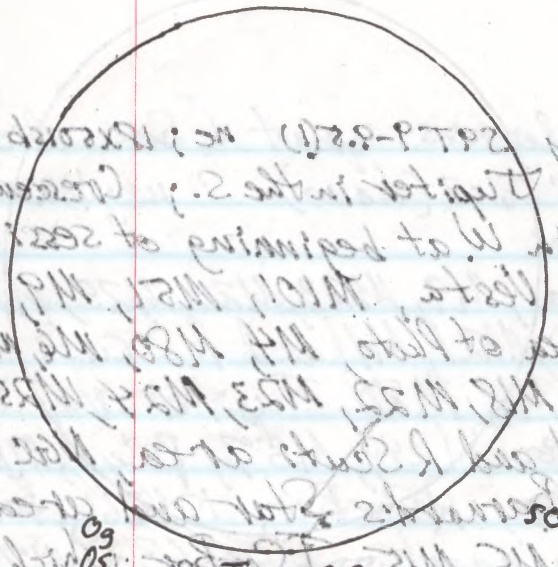
F. June 22 17:25-17:30 UT t C8, 32, 28, 20, 155
Sun Og Os RSNO T.O.F.

F. June 22 17:45-17:50 UT ad P.S.T.; 20, 28, 20E, 155
Sun in Hα - scarcely any hints of prominences at all

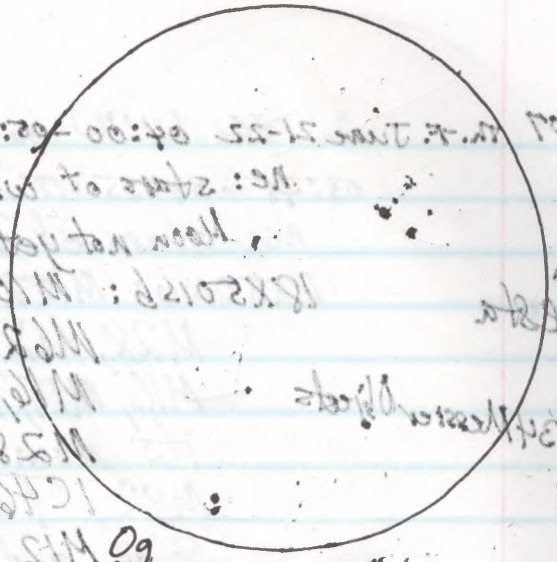
F.-S. June 22-23 04:40-05:55 UT y 58T 9.5 ne; 18X50 156
ne: Stars of summer, Jupiter in the S.

Vesta 18X50156: M107 and Vesta, M9, M19, M62, M10, M12, M14, M8, M20, M21, M22, M28, M16, M17, M18, M11 and R Scuti, M26, M23, M24, M25, M2, M57, M27, M71, M29, M39, M2, U and E U Del, M5, M15, M51, M101, NGC 654 (near M103), NGC 7789, T Cor Bor, R Cor Bor, Cor Caroli, Barnard's Star and area, NGC 6633, M81, M82, Kemble's Cascade, Kemble 2, M31, M32, M110, M4, M80, β Cyg, Col 299.

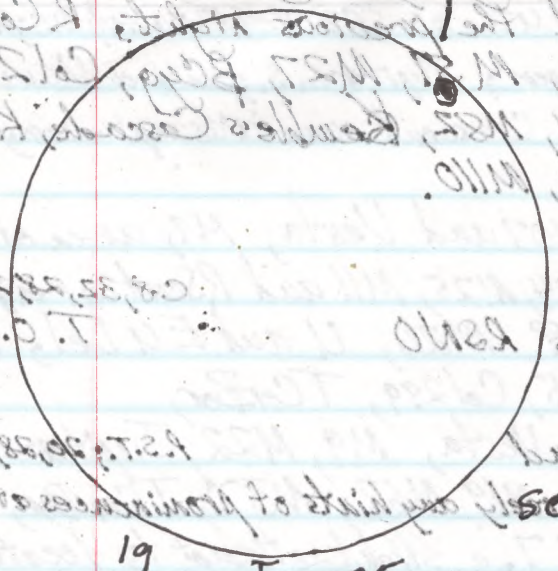
38 Messier Objects



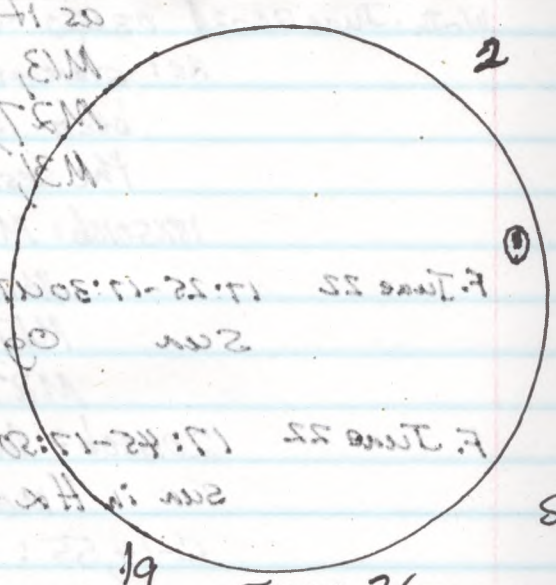
June 23
18:35-18:40 UT



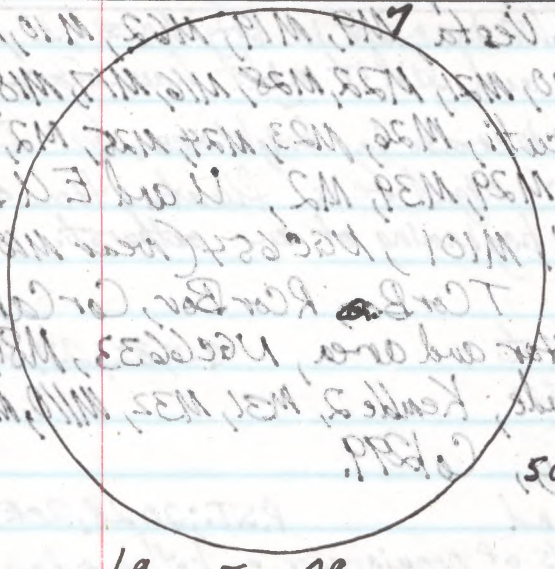
June 24
17:30-17:35 UT



June 25
19:35-19:40 UT



June 26
17:22-17:25 UT



June 29
17:35-17:40 UT

2007 Sa. June 23 18:35-18:40 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Sa. June 23 18:40-18:45 UT nd P.S.T.; 20, 28, 20E, 15
sun in Hα - only "hints" of some prominences

Sa-Su. June 23-24 04:45-04:50 UT nd STT 45 (cloud) ne
I observed briefly, in spite of a sky that was partly overcast, but there was some clearing. I saw Jupiter in the S., and the Big Dipper. A bit of the moon was seen amid the trees to the W.

Su. June 24 17:30-17:35 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Su. June 24 17:40-17:45 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - only some 'hints' of prominences

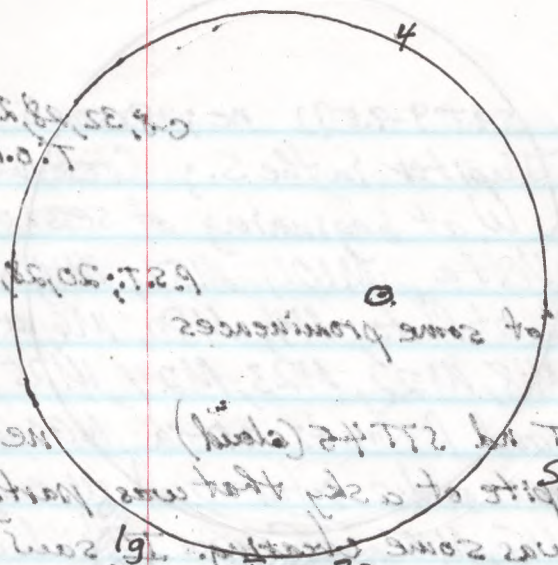
M. June 25 19:35-19:40 UT t C-8, 32, ~~28, 20~~
Sun lg ls RSNII T.O.F.

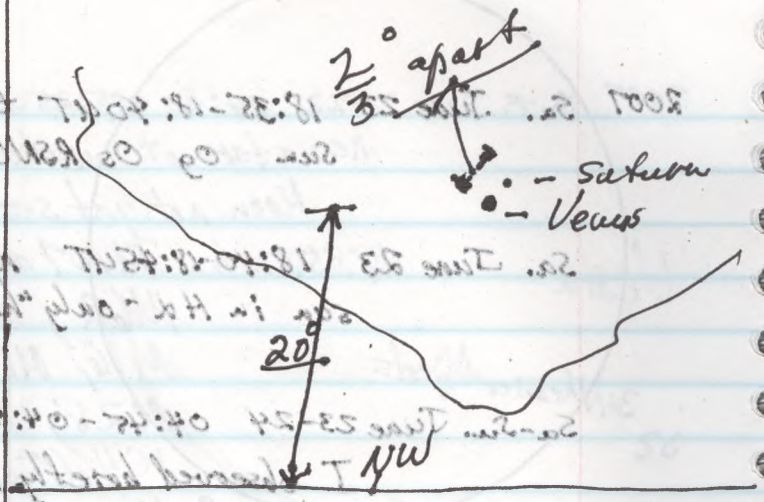
M. June 25 19:~~40~~-19:45 UT nd
Sun in Hα - definite indications of small prominences on the lower part of the disk, especially the lower right.

Tu. June 26 17:22-17:25 UT t C-8, 32, 28
sun lg 2s RSNIZ T.O.F.

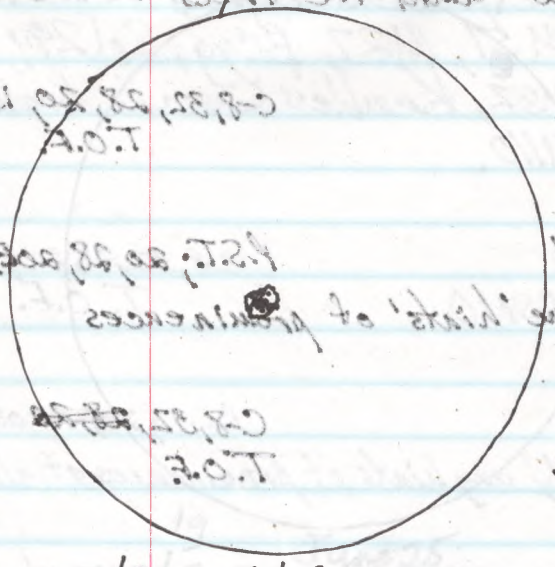
Tu. June 26 17:25-17:28 UT nd P.S.T.; 20
Sun in Hα - only "hints" of prominences on lower right side and at the bottom of the disk

F. June 29 17:35-17:40 UT t C-8, 32, 28, 20, 15.5
Sun lg 7s RSNI7 T.O.F.





2007, July 2, 01:40 UT View to NW showing Venus-Saturn conjunction



2007 F. June 29 17:40-17:45 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only small hints of prominences at the bottom limb of the sun, and white faculae near the sunspot

F.-S. June 29-30 03:02-03:07 UT nd+j S?T4-5 (faul) ne
I briefly observed with a very bright almost Full Moon in the SE (roughly 10 hours before the moment of Full Moon). Jupiter was about 6° from Antares and about 21°, up and to the right from the moon. The Summer Triangle of stars were high in the E. The Big Dipper was in the NW and Arcturus was high in the W.

Sa. June 30 19:00-19:05 UT t C-8, 32, 28, 20, 16.5
sun 1g 4s RSN14 T.O.F.

Sa. June 30 19:10-19:15 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - some hints of small sharp prominences on the lower half of the disk

S.-M. July 1-2 01:40-01:45 UT y twl ne
During bright twilight I observed the closest easily-visible bright planet conjunction of the year, namely the Venus-Saturn Conjunction in the NW evening sky. They had been close the previous night also, though I had not seen them at that time. (See diagram.) They were about 20° above the NW horizon and only about $\frac{2}{3}$° apart

Venus-Saturn Conjunction

M. July 2 17:35-17:40 UT t C-8, 32, 28, 20, 15.5
sun 1g 7s RSN17 T. O.F.

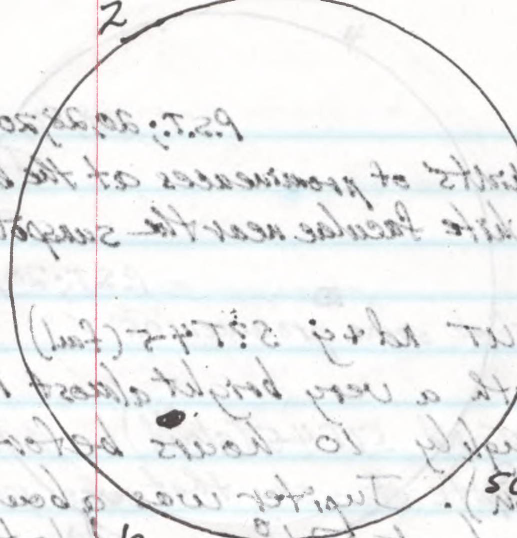
M. July 2 17:40-17:45 UT nd P.S.T.; 20, 28, 20E, 15.5.
sun in Hα - some hints of prominences, especially on bottom edge.

2007 F. June 29 17:40-17:45 UT nd P.S.T.; 20,28,20E,15.5

Sun in Hα - only small hints of prominences at the bottom limb of the sun, and white faculae near the sunspot

F.-S. June 29-30 03:02-03:07 UT nd+g; 5.7 [illegible] (fml) ne

I briefly observed with a very bright almost Full Moon in the SE (roughly 10 hours before the moment of Full Moon). Jupiter was about 6° from Antares and about 8½° to the right from the Moon. The stars of [illegible] were high in the E. The Big Dipper was in the NW and Arcturus was high in the W.



19 July 3 28 [illegible] 18:00-18:05 UT

Sa. June 30 19:00-19:05 UT t C-8, 32, 28, 20, 15.5 T.O.F.

Sun 19 4s RSN 14

Sa. June 30 19:10-19:15 UT nd P.S.T.; 20,28,20E,15.5

Sun in Hα - some hints of small sharp prominences on the lower half of the disk

S.-M. July 1-2 01:40-01:45 UT v twil ne

Venus-Saturn Conjunction

During bright twilight I observed the closest easily-visible bright planet conjunction of the year, namely the Venus-Saturn Conjunction in the NW evening sky. They had been close the previous night also, though I had not seen them at that time. (See diagram.) They were about 20° above the NW horizon and only about 2/3° apart.

M. July 2 17:35-17:40 UT t C-8, 32, 28, 20, 15.5 T.O.F.

Sun 19 7s RSN 17

M. July 2 17:40-17:45 UT nd P.S.T.; 20,28,20E,15.5

Sun in Hα - some hints of prominences, especially on bottom edge.

2007 M.-T. July 2-3 02:45-03:30 UT y twl except last 4 min ne; 18X50 15b

ne: With astronomical twilight ending at 03:26 UT, my session was in twilight except for the last 4 minutes and for the last ½ hour of the session a bright glow from the rising gibbous moon was seen in the SE. Moonrise was at 02:47 UT Jupiter was very bright in the S. and other bright stars of summer were seen. Venus had been seen earlier

18X50 15b: M4, M13, M92, M11 and R. Scuti, M16, M17, M18, M26, M8, M20, M21, M23, M24, IC4665, Barnard's Star and its area, NGC 6633, area of M107, area of the asteroid Vesta and probably the asteroid though I was not sure at the time of having seen it.

Tu. July 3 18:00-18:05 UT t C-8, 32, 28, 20, 15.5

Sun lg 2s RSN12 T.O.F.

Tu. July 3 18:10-18:15 UT nd P.S.T.; 20, 28, 20E, 15.5

sun in Hα - some 'hints' of small, sharp prominences

Th.-F. July 5-6 03:15-03:20 UT nd twl (near end; S6T7 some cloud) ne

I observed the stars of summer and bright Jupiter in the S.

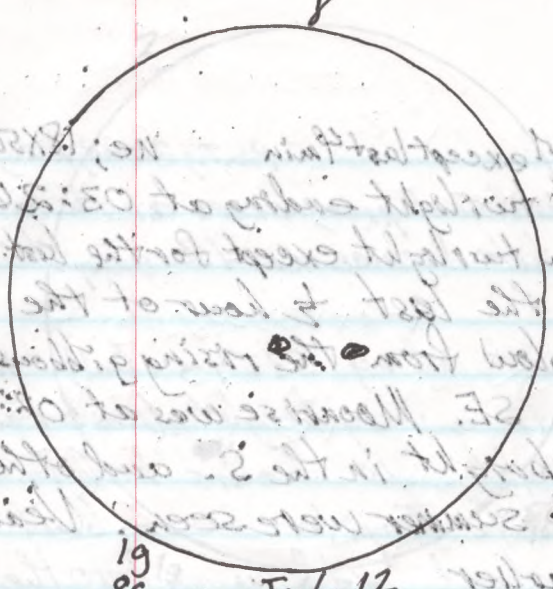
F.-S. July 6-7 03:30-03:45 UT y .s?T4-5 (clouds/haze) ne; 18X50 15b

ne: I observed briefly seeing some stars of summer and Jupiter in the S., but there was considerable cloud and haze

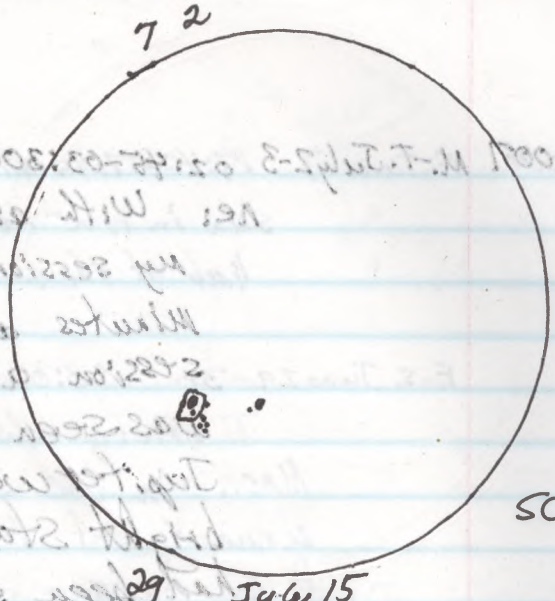
18X50 15b: Jupiter and 3 of its moons, M4, M19, M62, M13, M92, M22.

M.-T. July 9-10 02:55-04:05 UT y S7T2→9.5! ne; 18X50 15b

ne: At the beginning of the session and for 20 minutes



19
8S
RSN18 July 12
17:00-17:05 UT



29
9S
RSN89 July 15
16:13-18:20 UT

2007 or more the sky was very cloudy, with extremely poor seeing, but gradually it cleared and became very transparent - a magnificent transformation - revealing the stars of summer and the Summer Milky Way. Jupiter was bright in the S.
18X50L56: M4, M80, Jupiter and 4 moons, M107, M9, M19, M62, area of Pluto, M8, M20, M21, M22, M28, M11 and R Scuti, M26, M16, M17, M18, M23 M24, M25, M27, M57, Col 299, M71, M5, M15, β Cyg, R Cor Bor, T Cor Bor, Barnard's Star and area, NGC 6633, NGC 7789.

W.-Th. July 11-12 03:50-04:50 UT YS? T9 ne; 18X50L56
ne: stars of summer, Jupiter in the S.
18X50L56: area in Aquilae of the upcoming occultation by the asteroid Hearietta of a star slightly N of 46 Aquilae (See MSA 1243); Comet C/2006 V2 13 (LINEAR) at about mag. 9.9 at approx. R.A.: 15h 36m; Dec +60° 5' (See U51.), M6, M7, M11 and R Scuti, M26, M16, M17, M18, M8, M20, M21, M22, M23, M24, M25, M28, M5, M15, M13, M92, M110, M51, M57, M81, M82, M2, M31, M32, M101, M9, M107, Keuble's Cascade, Keuble 2.

Comet C/2006 V2 13 (LINEAR)

30 Messier objects

Th. July 12 17:00-17:05 UT t C-8, 32, 28, 20, 15.5
Sun 1g 8s RSN18

Th. July 12 17:10-17:15 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - some hints of prominences on bottom limb.

Su. July 15 18:15-18:20 UT t C-8, 32, 28, 20, 15.5
Sun 2g 9s RSN29 T.O.F.

Su. July 15 18:30-18:35 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - Only some "hints" of prominences

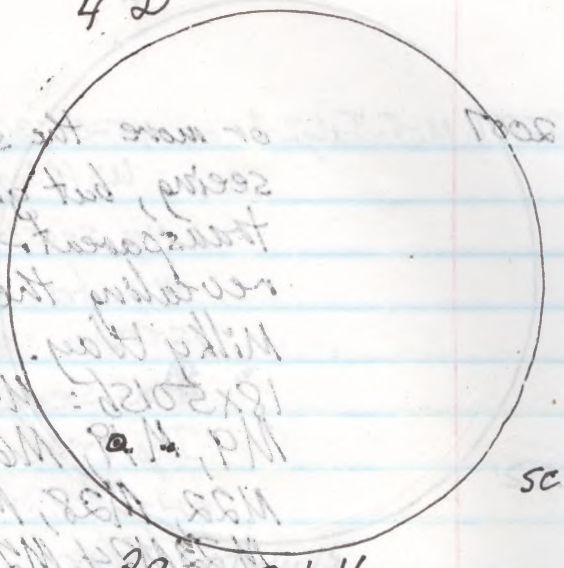
Occultation:
Asteroid: 225 Henrietta
d: 120km (0.105")
dist: 1.5800 AU.
△ 2.1 mag; < 15 seconds

Star: TYC 1065-00745-1
R.A.: 19 42 59.1731
Dec.: +12 49 41.027
mag.: 10.6

about ½° N of 46 Aquilae
4° N. of Altair

Path width: 143km R: 99%
see MSA 1243.

42



SC

29
65
RSN26

July 16
17:25-17:30 UT

2007 S-M. July 15-16 02:20-05:00 UT 00 S? T9 no 8x50 15b 20x100; C-14, 32

we: stars of summer, Jupiter in the S.

18x50 15b: M11 and R Scuti, M16, M17, M18, M23, M24, M25, M10, M12, M107, Jupiter and 3 moons.

20x100 b: M11 and R Scuti, M16, M17, M18, M23, M24, M25, M26, M22, M28, M8, M20, M21, M107, M9, M14, M80, M9, M19, M62, area of Pluto, area of the star that was to be occulted by the asteroid 225 Henrietta.

C-14, 32: Jupiter and 3 of its Galilean moons, the star to be occulted by the asteroid 225 Henrietta. I waited until about the time predicted for the occultation. Then I observed the star steadily until I saw the 2 magnitude drop in brightness which virtually made the star disappear for about 12 seconds. My extrapolation from approximate "end time" gave me the following times

successful observation: occultation of a star in Aquila by 225 Henrietta

"Beginning of event: 04:45:47 UT"

"End of event: 04:45:59 UT"

"Duration: 12 seconds"

Prior to the event the path was predicted to cross North America from East to West with my location being very near the southern limit of the path. I was concerned that if it shifted northward, I might not see the event. Obviously that did not happen. (See predictions on opposite page.)

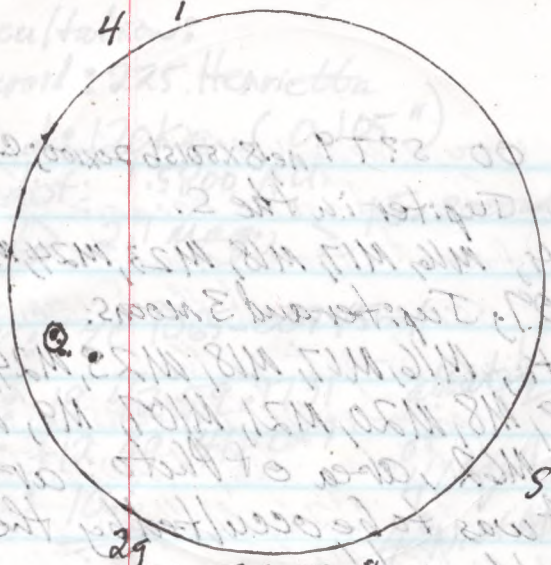
M. July 16 17:25-17:30 UT t C-8, 32, 28, 20, 15.5

Sun 29 6s RSN26 T.O.F.

M. July 16 17:35-17:40 nd P.S.T.; 20, 28, 20E, 15.5

Sun in H-α - only some "hints" of prominences

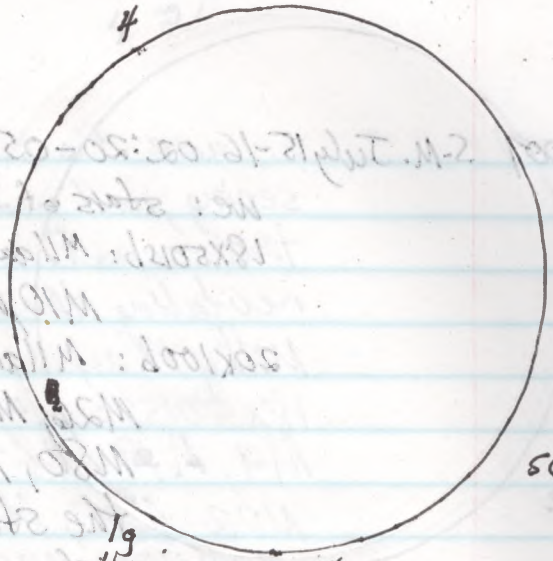
4 1



2g
5s
RSN25

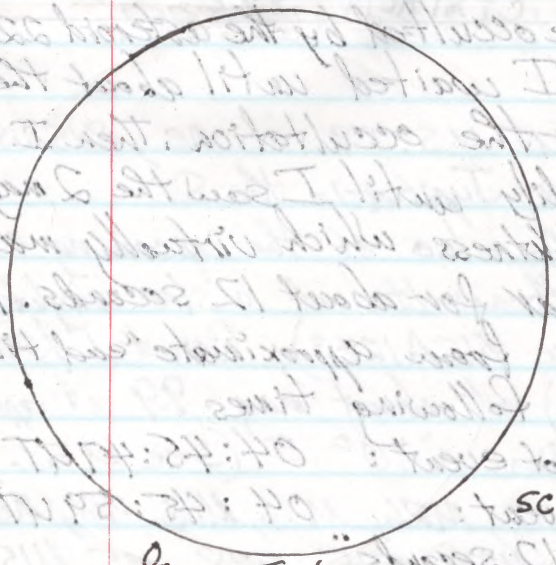
July 17
17:20-17:25 UT

4



1g
4s
RSN14

July 18
18:10-18:15 UT



0g
0s
RSN0

July 21
17:45-17:50 UT

2007 M.-T. July 16-17 04:10-04:50UT y S?T9 ne; 18x50Isb
ne: stars of summer; 2 Perseids
18x50Isb: M16, M17, M18, M23, M24, M25, M8, M20, M21, M22, M28, M10, M12, M27, M71, M15, M2, NGC663, Kemble's Cascade, Kemble 2, M31, M32, M110.

Tu. July 17 17:20-17:25UT t C-8, 32, 28, 20, 15.5
sun 2g 5s RSN25 T.O.F.

Tu. July 17 17:25-17:30UT ad P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only "hints" of prominences on the disk

W. July 18 18:10-18:15UT C-8, 32, 28, 20, 15.5
sun 1g 4s RSN14 T.O.F.

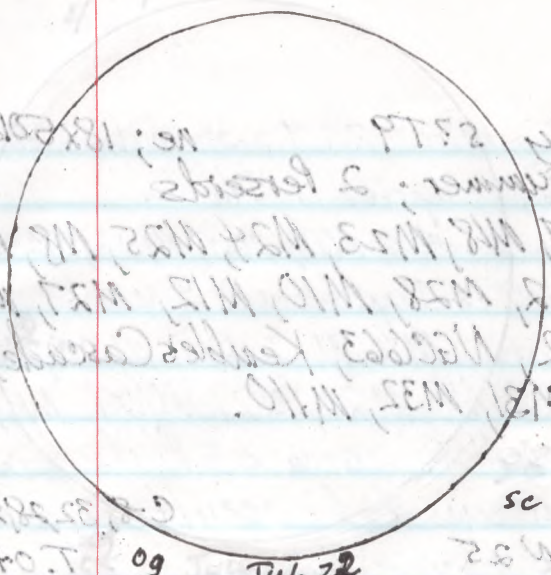
W. July 18 18:15-18:20UT P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only slight "hints" of prominences on the disk

Sa. July 21 17:45-17:50UT t C-8, 32, 28, 20, 15.5
sun 0g 0s RSN0 T.O.F.

Sa. July 21 17:50-17:55UT ad P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only slight "hints" of prominences on the disk.

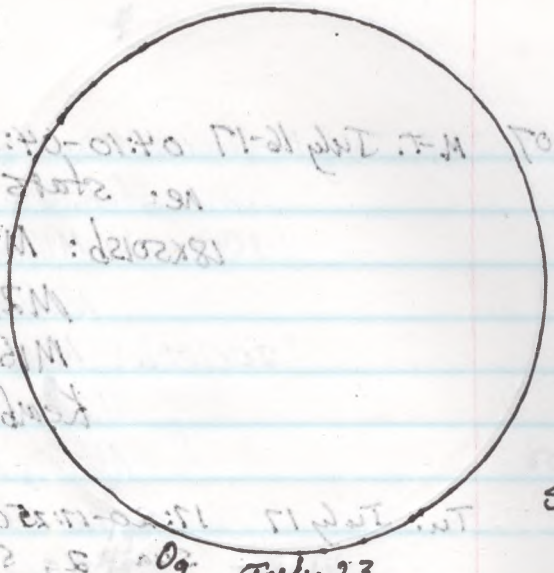
Sa.-Su July 21-22 03:50-05:20UT y S8T9-9.5 ne; 18x50Isb
ne: stars of summer, meteor in the N. about mag. 0.
18x50Isb: M3, C/2006 VZ13 (LINEAR) about 2.5° from M3 - little or no tail visible in the binoculars, M11 and R Scuti, M26, M16, M17, M18, M23, M24, M25, M22, M28, M13, M92, M12, M15, M81, M82, M51, M101, IC4665, Barnard's Star, NGC6633, NGC7789, NGC663, Double Cluster in Perseus and Stock 2, Kembles Casade,

Comet (C/2006 VZ13)



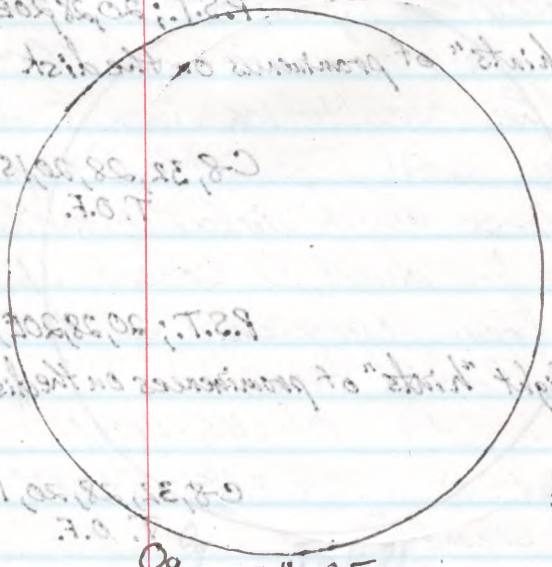
SC

Og
Os
RSNO July 22
17:[illegible]-17:[illegible] UT



SC.

Og
Os
RSNO July 23
18:30-18:35 UT



SC

Og
Os
RSNO July 25
17:25-17:30 UT

2007. Kemble 2, M31, M32, M110, M33, area of Uranus in Aquarius, area of Neptune in Capricornus.

Su. July 22 17:05-17:10 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

Su. July 22 17:10-17:15 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - numerous hints of prominences around the disk.

S.-M. July 22-23 03:55-05:05 UT y S?T9 (some clouds, esp. in S.) ne; 18X50 IS b
ne: stars of summer
18X50 ISb: area of Uranus in Aquarius, area of Neptune in Capricornus, M3, C/2006 VZ13 (LINEAR) a comet about 1 degree or less from M3, M10, M12, M14, M11 and R Scuti, M16, M17, M18, M8, M22, M20, M21, M23, M24, M25, M15, M13, M62, M81, M82, Kemble's Cascade, Kemble 2, M31, M32, M33, M110, area of α Her and α Oph, Barnard's Star and area, NGC 752, NGC 7789, NGC 663 in Cassiopeia, NGC 6633 in Oph, Double Cluster and Stock 2, IC 4665

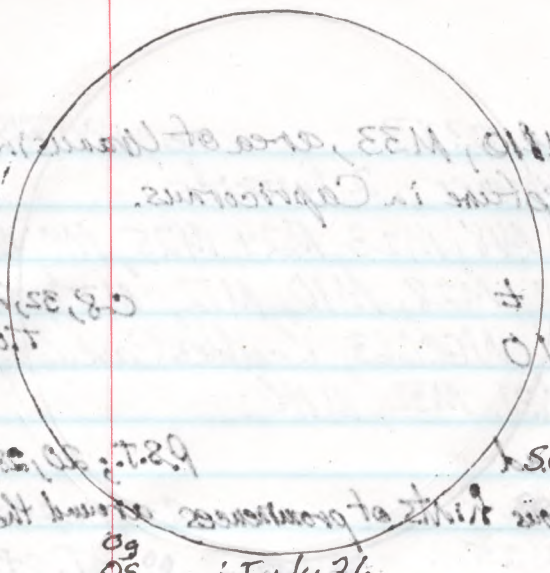
Comet C/2006 VZ13 (LINEAR) near M3

M. July 23 18:30-18:35 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO hazy conditions; cirrus cloud. T.O.F.

M. July 23 18:35-18:40 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - some hints of prominences; hazy conditions

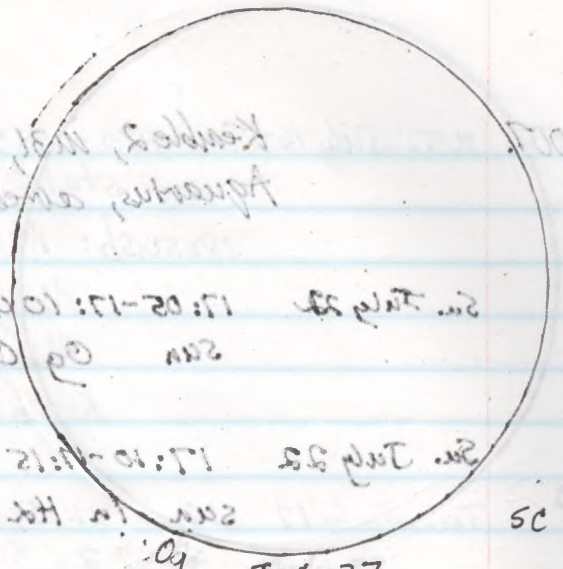
W. July 25 17:25-17:30 UT C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

W. July 25 17:35-17:40 UT P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only slight hints of prominences



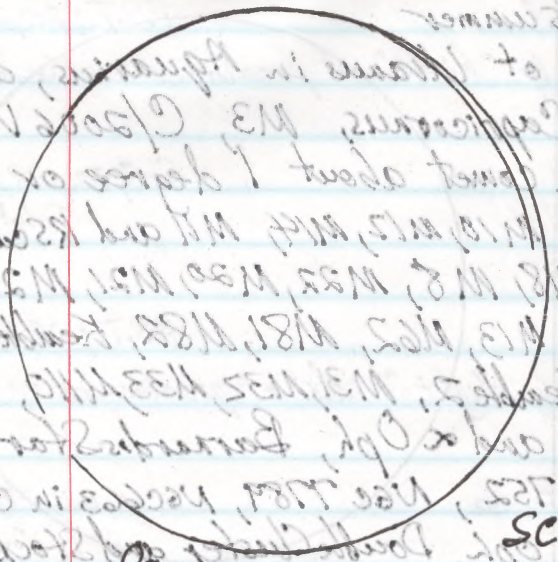
Og
Os
RSNO July 26
16:55-17:00UT

SC



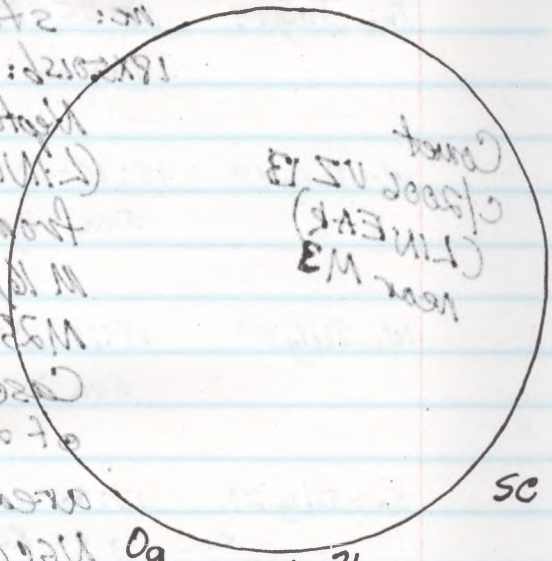
Og
Os
RSNO July 27
16:30-16:35UT

SC



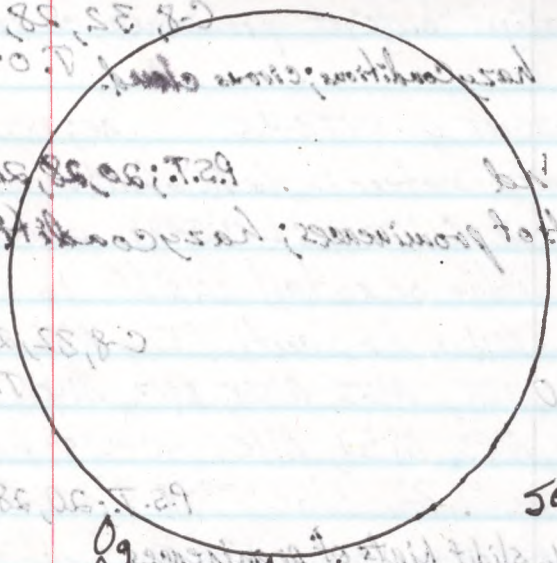
Og
Os
RSNO July 30
17:20-17:25UT

SC



Og
Os
RSNO July 31
18:15-18:20UT

SC



Og
Os
RSNO Aug 1
17:20-17:25UT

SC

Th. July 26 16:55-17:00 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Th. July 26 17:00-17:05 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - one definite small prominence at the 7 o'clock position on the disk and some other kinds of prominences

02 F. July 27 16:30-16:35 UT t C-8.32, 28, 20, 15.5
Sun Og Os RSNO T. O.F.

F. July 27 16:35-16:40 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only hints of small prominences

M. July 30 17:20-17:25 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

M. July 30 17:25-17:30 UT nd P.S.T.; 20 28, 20E, 15
sun in Hα - no definite prominences, but some slight "hints" of prominences.

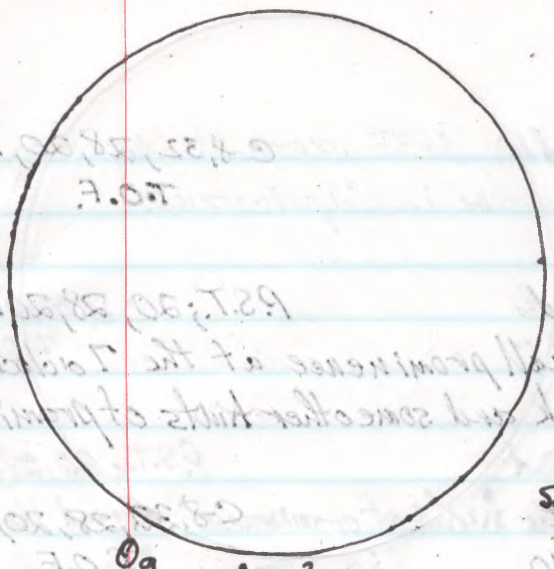
Tu. July 31 18:15-18:20 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

Tu. July 31 18:20-18:25 UT nd P.S.T.; 20, 28.
Sun in Hα - only "hints" of some prominences

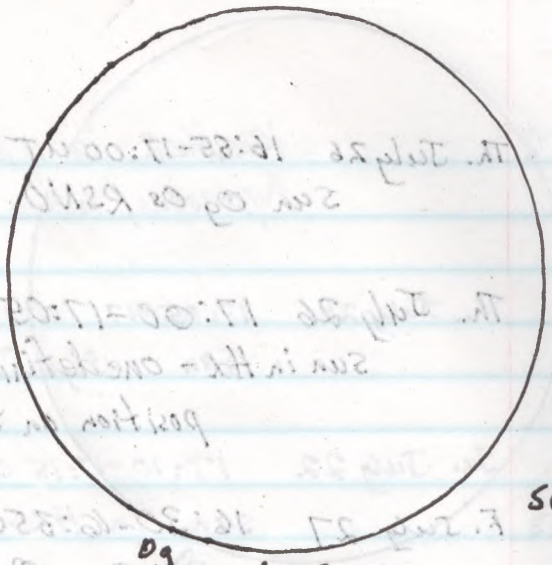
W. Aug. 1 17:20-17:25 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

W. Aug. 1 17:25-17:30 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only some hints of prominences on the disk.

W.-Th. Aug. 1-2 01:30-02:45 UT y twl and afternoonrise ne; 18X50156
ne: During twilight I observed as stars came into



Aug 2
17:30-17:35 UT



Aug 3
17:05-17:10 UT

view. Sunset had been at 00:33 UT, and the moon rose at 01:58 UT. I continued to observe for about another ¾ of an hour. The end of astronomical twilight was at 02:39 UT, just a few minutes before I stopped observing. I thought I might see some Perseid Meteors, but did not knowing see any. Jupiter was bright in the S.

18X50156: Jupiter and at least 3 of its Galilean moons; M11 and R Scuti; M26; M22; M8, area of M107, area of α and β Capricorni, M10, M12, Areas of R CorBor and T CorBor, but not sure of seeing either of them - perhaps not seeing T because of sky brightness after moonrise, and perhaps R was at the dimmer part of its cycle.

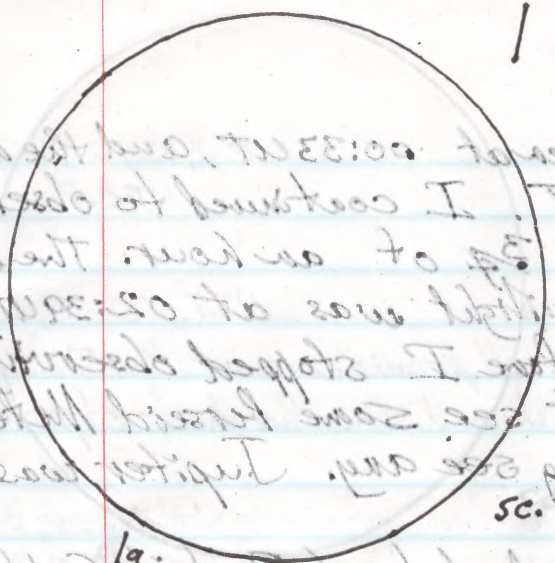
Th. Aug. 2 17:30-17:35 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Th. Aug. 2 17:40-17:45 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - some 'kinks' of prominences on the disk.

Th.-F. Aug. 2-3 02:30-03:15 UT y twl; S? T5→3 (haze, ml; cloud some) 18X50156 ne; ∧
ne: some stars of summer and Jupiter in the S.; After the end of astronomical twilight the haze persisted and clouds increased and transparency decreased. One bright meteor was seen
18X50156: Jupiter and 2 of its moons; M11 and R Scuti, area of R CorBor, but the star was not knowingly seen, since it may have been near minimum brightness.

F. Aug. 3 17:05-17:10 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

1



5c.

lg
S
RSNII

Aug. 4
18:45–18:50 UT

18X50b: Jupiter and at least 3 of its moons. M1 and M2 (Callisto and Ganymede) were close to Jupiter's disk, but M3 (Europa) was not seen. Jupiter was visibly oblate.

Moons: M1 and M2 were at E and W elongations, M3 was at E elongation.

Tu. Aug. 2 17:30–17:35 UT

Sun Oc Os RSNII

Tu. Aug. 2 17:50–17:55 UT

Sun in the same fields of prominences on the disk.

Th-F Aug. 2-3 02:30–03:15 UT

Me: Same state of seeing and Jupiter in the S.

After the end of astronomical twilight the haze persisted and Orion's inverse and transparency observed. One magnitude worsened.

18X50b: Jupiter and 3 of its moons: M1 and M2 were east of Callisto, but the 3rd was not seen since it was close to the minimum brightness.

F. Aug. 3 17:05–17:10 UT

Sun Oc Os RSNII

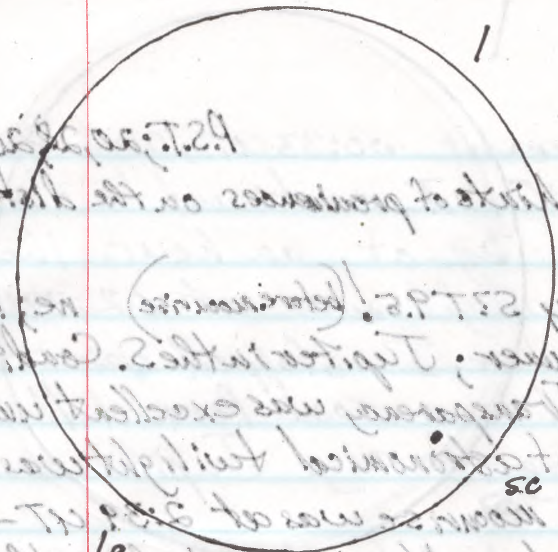
2001 F. Aug. 3 17:10-17:15 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - only hints of prominences on the disk.

F.-S. Aug. 3-4 02:10-03:15 UT y S?T 9.5! (before moonrise) ne; 18X50156
ne: stars of summer; Jupiter in the S. Conditions were superb! Transparency was excellent until moonrise. End of astronomical twilight was at 2:35 UT and moonrise was at 2:39 UT - only 4 minutes later. However, before the end of twilight conditions were excellent.
18X50156: M11 and R Scuti, M16, M17, M18, M6, M7, M8, M20, M21, M23, M24, M25, M22, M28, M69 in the Teapot of Sagittarius, M13, M92, M57, M27, M71, M39, M5, M10, M12, M14, IC 4665, Barnard's Star, NGC6633, M15, M2, M81, M82, M3, M101, M51, M31, M32, M110, Stock 2, NGC663, M103, Kemble's Cascade, Kemble 2, M4, M80, M107, M9, area of α Oph and α Her, T CorBor, area of R CorBor though the star was probably too faint in its cycle to be seen.
40 Messier Objects.

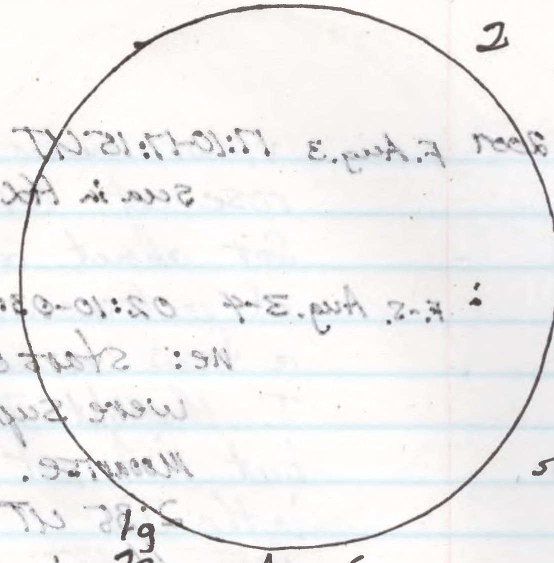
Sa. Aug. 4 18:45-18:50 UT t C-8, 32, 28, 20, 15.5
Sun lg 16 RSN11 T.O.F.

Sa. Aug. 4 18:55-19:00 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - definite hints of small prominences on the disk

Sa.-Su. Aug. 4-5 02:35-03:50 UT y S?T 9 (until moonrise) ne; 18X50156
ne: stars of summer; Jupiter in the S. Excellent transparency until the moon rose at 03:02 UT; after that the sky was more and more washed out
18X50156: M11 and R Scuti, M26, M16, M17, M18, M8,



19
15
RSNN
Aug. 5
17:20-17:25 UT.



19
28
RSN12
Aug. 6
18:55-19:00UT

2007 M20, M21, M23, M24, M25, M28, M22, M69, M70 in Sagittarius, M10, M12, M14, M2, M15, M31, M32, M110, M13, M92, M81, M82, M3, M101, M51, M103, NGC 663 and NGC 654 in Cassiopeia, T CorBor, area of R CorBor; but star was not seen with certainty, perhaps being at, or near, minimum, Barnard's Star, NGC6633, IC4665, area of ζ Oph and ζ Her.

ph: photographed various areas of the sky in 20-sec. exposures.

Sa. Aug. 5 17:20-17:25UT t C-8, 32, 28, 20, 15.5
sun lg 15 RSN11 T.O.F.

Sa. Aug. 5 17:25-17:30 UT y P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only few "hints" of small prominences on the disk

S.-M. Aug. 5-6 01:55-02:20UT y 5?T1 (cloud) ne
When I tried to observe, I found it almost overcast with Jupiter and the Summer Triangle and Arcturus and some other bright stars occasionally peeking through the clouds.

M. Aug 6 18:55-19:00 UT t C-8, 32, 28, 20, 15.5
sun lg 25 RSN12 T.O.F.

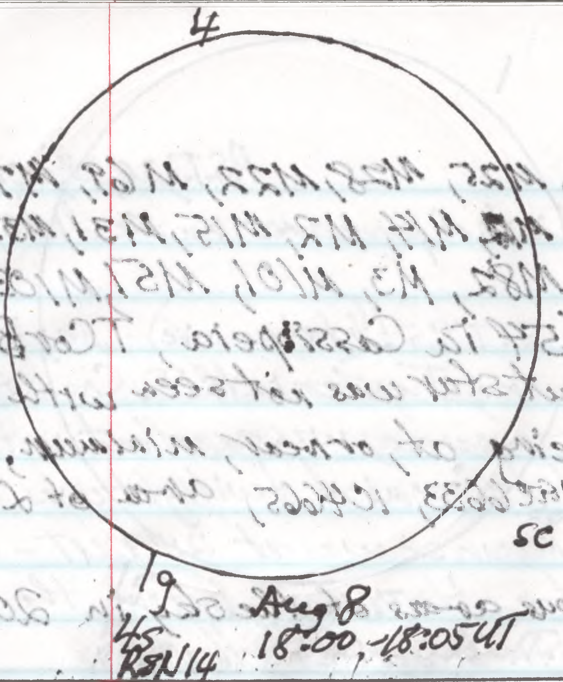
M. Aug. 6 19:00-19:05 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of small prominences on the solar disk.

M.-T. Aug. 6-7 03:00-04:20UT y 5?T1-8.5 (cleared) ne; 18X50L56
ne: stars of summer; 1 Perseid meteor. Early in the session, the sky was very cloudy. After a while it cleared and transparency was good.
18X50L56: Uranus in Aquarius, between 96 Aquarii

Uranus,

2007

M20, M21, M23, M24, M25, M28, M22, M69, M70
in Sagittarius, M10, M14, M12, M15, M31, M27,
M110, M13, M92, M81, M82, M3, M101, M57, M103,
NGC 663 and NGC 654 in Cassiopeia. T Cor Bor,
area of R Cor Bor: but star was not seen with
certainty, perhaps being at, or near, minimum.
Barnard's Star, NGC 6633, IC 4665, area of d Oph
and κ Her.
ph: photographed various areas of the sky in 20-sec.
exposures.



Su. Aug. 5 17:20-17:25 UT t C-8, 32, 28, 20, 1SS
Sun 1g 15 RSN 11 T.O.F.

Su. Aug. 5 17:25-17:30 UT y P.S.T.; 20, 28, 20E, 1SS
Sun in Hα - only few "hints" of small prominences on the disk

S-M. Aug. 5-6 01:55-02:20 UT y SST1 (cloud) ne
When I tried to observe, I found it almost overcast
with Jupiter and the Summer Triangle and Arcturus
and some other bright stars occasionally peeking
through the clouds.

M. Aug 6 18:55-19:00 UT t C-8, 32, 28, 20, 1SS
Sun 1g 25 RSN 12 T.O.F.

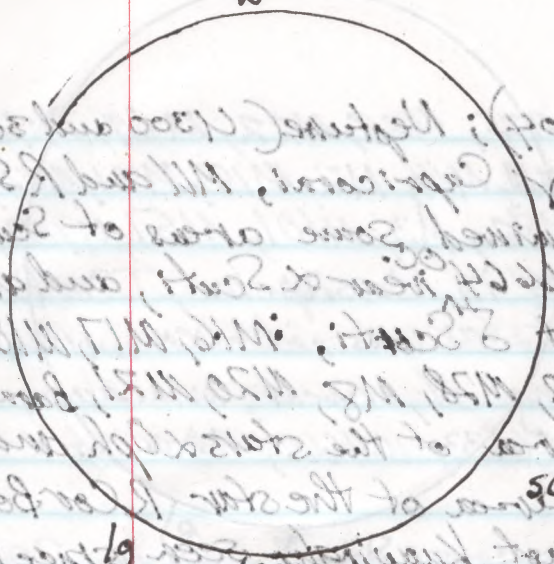
M. Aug. 6 19:00-19:05 UT nd P.S.T.; 20, 28, 20E, 1SS
Sun in Hα - hint of small prominences on the solar disk.

M.-T. Aug. 6-7 03:00-04:20 UT y SST1-38:5 (cleared) ne; 18X50IS
ne: Stars of Summer; 1 Perseid meteor. Early
in the session, the sky was very cloudy. After a
while it cleared and transparency was good.
18X50IS: Uranus in Aquarius; between φ Aquarii
Uranus;

2007 and ϕ Aquarii (U304); Neptune (U300 and 301)
and Neptune. NNW of the star γ Capricorni, M11 and R Scuti, M26, carefully examined some areas of Scutum and observed NGC 6664 OC near α Scuti, and also the G.C. NGC 6712, E. of δ Scuti, M16, M17, M18, M23, M24, M25, M22, M28, M8, M20, M21, Barnard's Star, NGC6663, area of the stars α Oph and α Her, T CorBor, area of the star R CorBor, but the star was not knowingly seen since it may have been at or near minimum, Kemble's Cascade, Kemble 2, Double Cluster in Perseus, NGC 654 and NGC 663 in Cassiopeia, M103, NGC 7789, M31, M32, M110, M33, M15, M2.

T.-W. Aug. 7-8 03:00-03:45 UT y s?T8-9-later cloudy ne; 18X50156
ne: Stars of summer; Transparency about 8.5 to 9 for most of the session. Then near the end of the session, the sky clouded over.
Neptune 18X50156: Neptune in Capricornus, M11, M26, M16, M17, M18, M8, M20, M21, M22, M28, M23, M24, M25, M2, M15, M30, M12, M14, M13, M92, areas of Scutum including NGC 6664 - OC near α Scuti, NGC 6712 - GC near M26; M103, NGC 663 and NGC 654 in Cassiopeia, NGC 7789, Double Cluster and Stock 2, Kemble's Cascade, Kemble 2, T CorBor, area of R CorBor but the star was not knowingly seen and it may have been at, or near, minimum, area of α Her and α Oph, NGC 6633, Barnard's Star, and area.
22 Messier objects

W. Aug. 8 18:00-18:05 UT t C 8, 32, 28, 20, 15.5
sua lg 45 RSN14 T.O.F.


2
SC
19
25
RSN12
Aug 9
19:44 - 19:50 UT

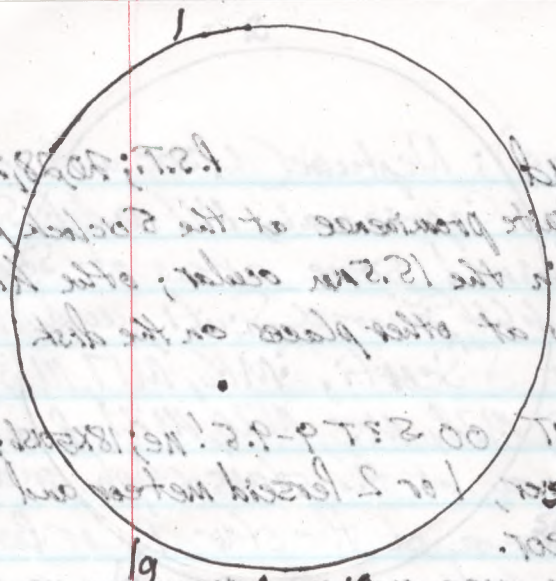
2007 W. Aug. 8 18:05-18:10 UT ud P.S.T.; 20,28,20E,15.5
sun in Hα - one definite prominence at the 5 o'clock position seen clearly in the 15.5mm ocular; other hints of prominences at other places on the disk

W.-Th. Aug. 8-9 02:30-05:00 UT 00 S?T 9-9.5! ne; 18x50b; 20x100b; C-14,55
ne: stars of summer, 1 or 2 Perseid meteor and 1 Sporadic Meteor.
18x50b: M11, M26, M22, M23, M24, M28, M8, M20, M21, M16, M17, M18,
20x100b: Uranus in Aquarius, Neptune in Capricornus, Various areas in Scutum: NGC6704 - compact oc about 1° N. of M11, M11, M26, Basl - the OC within the trapezium near M11, NGC 6712 - GC near M26, AC Scuti - about 1° S. of M26, NGC 6664 near α Scuti, area of NGC 6683, but not sure of seeing it among the star cloud of the Milky Way in that part of Scutum; the dark nebula B103 was easily seen. The 3 oc's Do 29, Do 30, and Do 31 could not be distinguished clearly though I thought I saw some hints of Do 29. They are W. of the dark nebula B103.
C-14,55: I observed without the star diagonal. M11 - quite spectacular; Basl - the OC within the trapezium near M11.

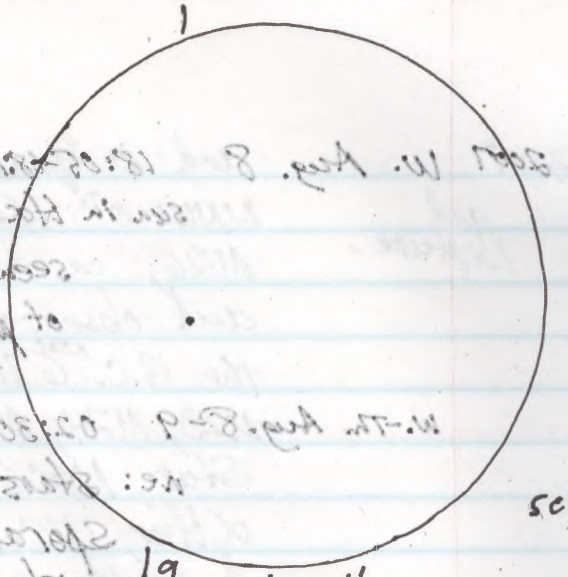
Uranus
Neptune
Basl
NGC6704
NGC6712
B103
Basl.

Th. Aug. 9 19:45-19:50 UT t C-8,32,28,20,15.5
sun lg 2S RSN12

Th. Aug. 9 19:50-19:55 UT ud P.S.T.; 20,28,20E,15.5
sun in Hα some hints of prominences, but somewhat hazy and cloudy conditions.



lg
15
RSN11 Aug. 10 18:40-18:45 UT



lg
15
RSN11 Aug 11 17:25-17:30 UT

2007 F. Aug. 10 18:40-18:45UT t C-8, 32, 28, 20, 15.5
sun lg ls RSN11 -back to 1 spot! T.O.F.

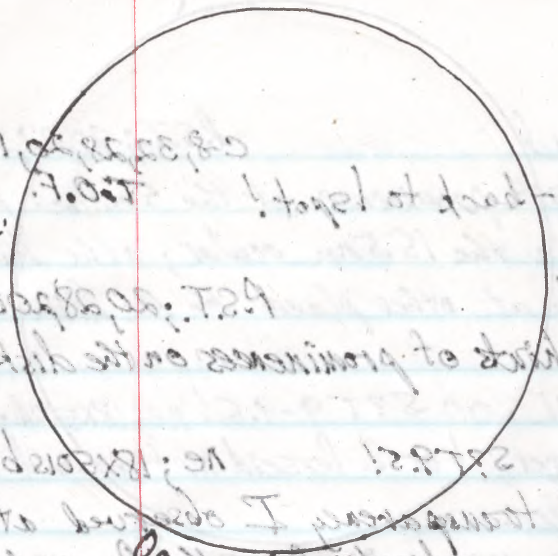
F. Aug. 10 18:45-18:50UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - some hints of prominences on the disk.

F.-S. Aug. 10-11 03:30-05:05UT y S?T 9.5! ne; 18X50156
ne: With excellent transparency I observed at a time of increasing activity from the Perseid Meteor Shower. Besides the stars of summer, I saw 2 bright Perseids and 3 sporadic meteors

Uranus Neptune 18X50156: Uranus in Aquarius; Neptune in Capricornus. I was about 98% sure that I was able to see the recently-discovered Nova in Vulpecula. It had been discovered on August 8th by Hiroshi Abe at R.A.: 19h 54m 24.64s; Dec.: +20° 52' 51.9". It may have been about mag. 8 to 8.5. (See U161.); also M16, M17, M18, M24, M25, M22, M28, M11 and R Scuti and area; M13, M92, area of α Her and α Oph; IC4665, Barnard's Star and area, Taurus Portiowski, NGC6633, T CorBor, area of R CorBor which was faint, probably too faint to be seen, M81, M82, Kemble's Cascade, μ Cep - the Garnet Star and the area around it, M31, M32, M110, M33, M2, M15, Levy 53 (NGC 752 in Andromeda), Double Cluster, Stock 2, Kemble 2.

S. Aug. 11 17:25-17:30UT C-8, 32, 28, 20, 15.5
sun lg ls RSN11 - one small spot seen with difficulty T.O.F.

S. Aug. 11 17:35-17:40UT P.S.T.; 20, 28, 20E, 15.5
sun in Hα - one small prominence at 4 o'clock position; hints of prominences elsewhere.


SC
Og
05
R&NO
Aug 12
16:25-16:30 UT

2007 F. Aug. 10 18:40-18:45 UT A C-8; 32, 28, 20; 1575 T.C.F.
Sun 1g 15 RSN 11 — back to 1 spot!

F. Aug. 10 18:45-18:50 UT rd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα — some hint of prominences on the disk.

F-S. Aug. 10-11 03:30-05:05 UT 15:7.5 Ne; 18X50 isb
Ne: With excellent transparency, I observed at a time of increasing activity the Perseid Meteor Shower. Besides the stars of summer I saw 2 bright Perseids and 3 sporadic meteors.

18X50 isb: Uranus in Aquarius; Neptune in Capricornus. I was about 98% sure that I was able to see the recently-discovered Nova in Vulpecula. It had been discovered on August 8th by Hiroshi Abe at R.A.: 19h 54m 24.64s; Dec.: +20° 52' 51.9". It may have been about Mag. 8 to 8.5. (See U161); also M16, M17, M18, M24, M25, M22, M28, M11 and R Scuti and area, M13, M92, area of α Her and α Oph; IC4665, Barnard's Star and area, Taurus Poniatowski, NGC6633, T CrBor, area of R CrBor which was faint probably too faint to be seen, M81, M82, Kemble's Cascade, μ Cep - the Garnet Star and the area around it, M31, M32, M110, M33, M2, M15, Lory 53, NGC 752 in Andromeda, Double Cluster, Stock 2, Kemble 2. Uranus Neptune

S. Aug. 11 17:25-17:30 UT C-8; 32, 28, 20; 1575 T.C.F.
Sun 1g 15 RSN 11 — one small spot seen with difficulty

S. Aug. 11 17:35-17:40 UT P.S.T.; 20, 28, 20E, 15.5
Sun in Hα — one small prominence at 4 o'clock position; hints of prominences elsewhere.

2007 S.-S. Aug. 11-12 03:05-04:15 UT 5 3 T 9 (occasional cloud) ne; 18X50B6
ne: stars of summer; 3 Perseid meteors including one of mag. -5 near β Lacertis at 03:54 UT. (The transparency was very good, but occasional clouds were present in parts of the sky.)
18X50B6: Uranus, Neptune, M2, M15, M11, M26, M28, M16, M17, M18, M22, M8, M20, M21, M31, M32, M110, M33, M103, NGC663 and nearby NGC654, Double Cluster in Perseus, Stock2, area of the reported nova in Vulpecula, and again 98% sure of seeing it, as on the previous evening, Kemble's Cascade, Kemble 2, M31, M32, M33, M110, T Cor Bor, area of R Cor Bor, but the star was not seen with certainty.

area of reported nova in Vulpecula

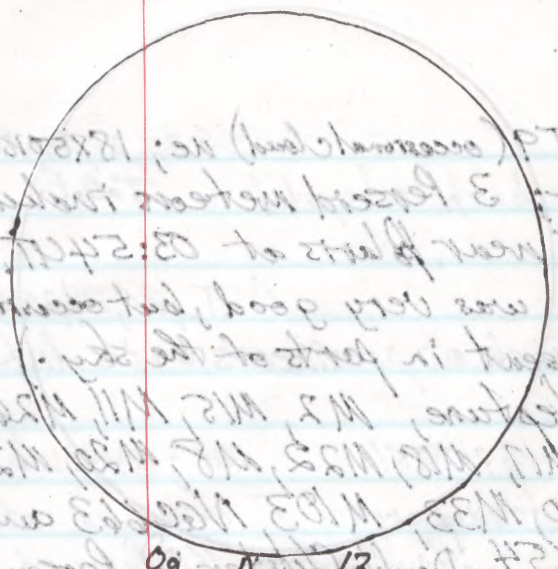
Su. Aug. 12 16:25-16:30 UT C-8, 32, 28, 20, 15.5
sua Og OS RSN The group has disappeared T.O.F.

Su. Aug. 12 16:30-16:35 UT nd P.S.T.; 20, 28, 20E, 15S
sua in Hα some hints of prominences around the solar disk.

S.-M. Aug. 12-13 01:00-06:40 UT y S 8 T varied: up to 9) ne
I observed the peak of the Perseid Meteor Shower along with 5 other members of the Kingston Centre and after having them for a barbecue at my place. John and Peggy Hurley and Kevin Kell and Kim Hay and Ken Kingdon came for the bbq and the observing session. Kevin, Kim and Peggy left about midnight (04:00 UT). John had left before that because he had to go to work at about 3:30 a.m. E.D.T.. Ken stayed until about 3:00 a.m. (6:00 UT).

Perseid Meteor Observing Group Session

The weather was not perfect since there were



Og. Aug. 13
OS
RSNO 17:50-17:55UT

2007

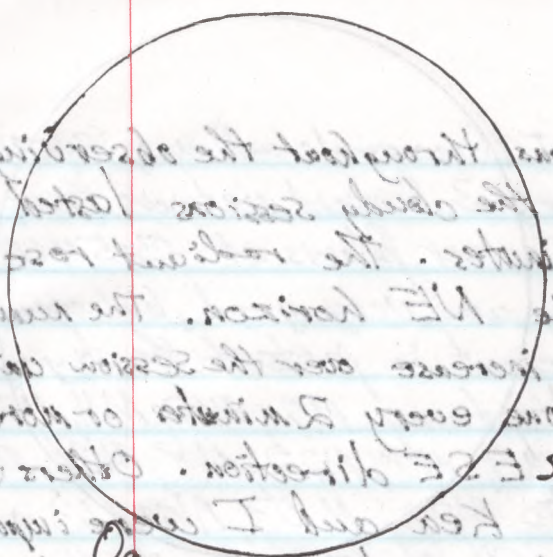
occasional cloudy sessions throughout the observing period, but most of the cloudy sessions lasted only about 5 to 10 minutes. The radiant rose slowly from near the NE horizon. The numbers of Perseids seemed to increase over the session until we were seeing almost one every 2 minutes or more. I was facing in the ESE direction. Others faced in other directions. Kea and I were impressed by the high number of sporadic meteors and meteors from Cygnus and Aquarius. According to Ottwells Astronomical Caleadar, 4 other showers were active: Kappa Cygnids, N. Delta Aquarids, N. Iota Aquarids and S. Iota Aquarids. A good percentage of the Perseids were quite bright. At about 5:15 UT (1:15 a.m. E.D.T.) Kea and I saw an extreamly brilliant fireball with a blue and purple train and an explosion of light - going from left to right through the bright stars of the constellation Aries. I estimated it at mag. −11! Though the weather was not perfect I regarded the event as a success and the Perseid Shower as a good one for this year.

- many sporadics
- brilliant mag. −11 fireball

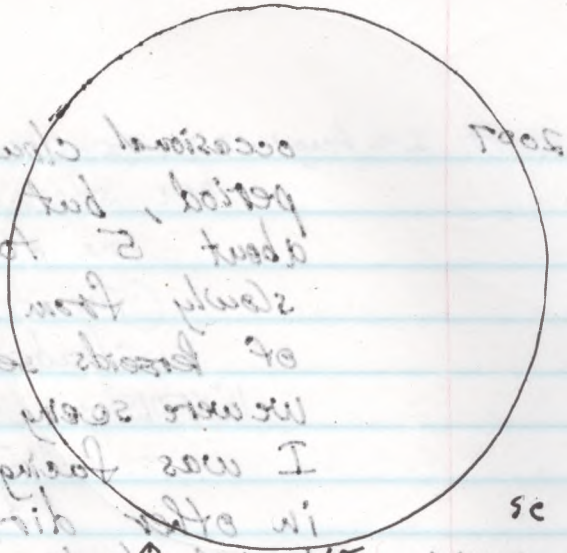
M. Aug. 13 17:50-17:55 UT t C-8,32,28,20,15.5
Sun Og Os RSNO T.O.F.

M. Aug. 13 17:55-18:00 UT nd. ßS.T.;20,28,20E,15.5
Sun in HL - hints of solar prominences on the disk.

M.-T. Aug. 13-14 03:00-04:30 UT y S?T9 ne;18x50156
ne: stars of summer; 2 Perseid and other meteors.
18x50156: Uranus, Neptune, M11 and R Scuti, M26, NGC6664 near ζ Scuti, AC Scuti, dark nebula B103 in Scutum, T Cor Bor, area of R Cor Bor, but not sure of seeing it - perhaps because it may be near



Og
Os Aug. 14
RSNO 18:00-18:05 UT



Og Aug. 15
Os
RSNO 17:20-17:25 UT

2007

minimum, area of α Her and α Oph, IC 4665, Barnard's Star and its area, NGC 6633, Kemble's Cascade, Kemble 2, M31, M32, M110, M33, M2, M15, M16, M17, M18, M24, M25, M22, M28, area of the nova discovered in Vulpecula. (I thought it appeared to have changed little, if any, since I last saw it.)

Tu. Aug. 14 18:00-18:05UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

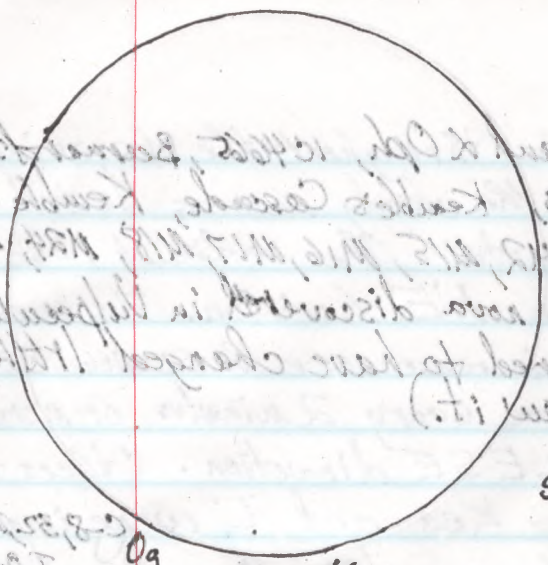
Tu. Aug. 14 18:05-18:10UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences on the solar disk.

Tu-W Aug. 14-15 00:30-01:30UT Muslim Camp on Bob's Lake overcast ne
-Fred Barrett and I went to the Muslim Camp on Long Bay on Bob's Lake to do an Astronomy presentation and have an observing session if weather permitted. He took his C-8 and I took the Astroscan and some slides. At about 23:30UT (7:30 p.m. E.D.T.) I gave the talk about what could be seen in the August sky and about some of the Arab contributions to astronomy. After they had their prayers, some of the children came out to observe, but it was cloudy. We waited for a while, but they called off the session because of the cloudy conditions. Fred and I packed up and came home.

W. Aug. 15 17:20-17:25UT t C8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

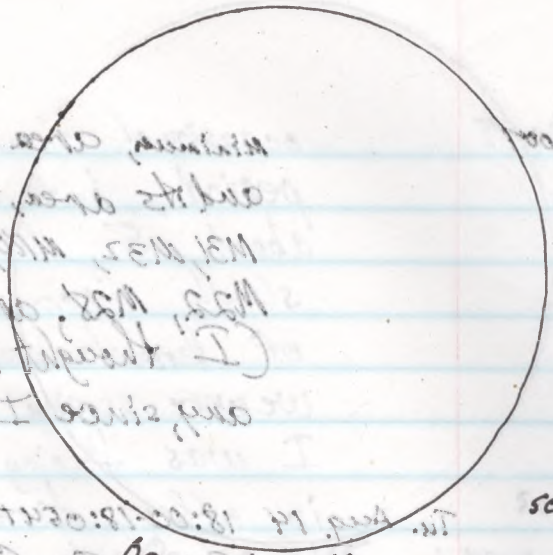
W. Aug. 15 17:25-17:30UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences on the solar disk.

W.-Th. Aug. 15-16 02:00-03:15 OO S?T8 → poor ne; 20x100b
ne: Jupiter in the S; stars of Summer. The transparency



Og
Os
RSNO
Aug. 16
18:20-18:25 UT

SC.



Og
Os
RSNO
Aug. 18
18:15-18:20 UT

SC

2007 was fairly good for a while at the beginning of the session, but it soon deteriorated in some parts of the sky and then generally. Then clouds covered most of the sky

20x1006 :: ~~Uranus~~ Neptune in Capricornus, M11 and R Scuti, M26, M16, M17, M18, M23, M24, M25, M8, M20, M21, M22, M28, area of α Oph and α Her, IC4665, Barnard's Star and area, NGC 6633.

ph : piggyback photographs of several areas of the sky

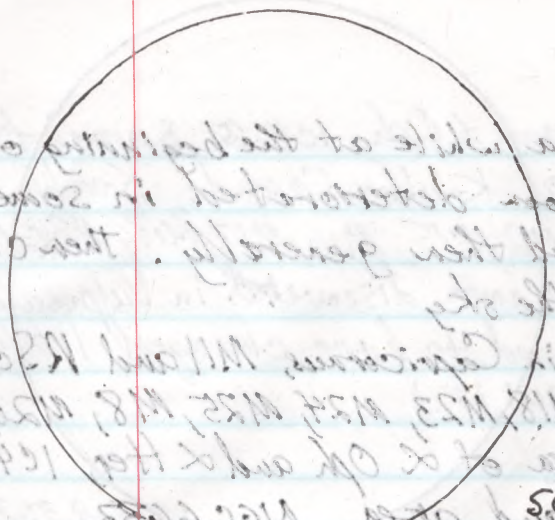
Th Aug. 16 18:20-18:25 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Th. Aug. 16 18:25-18:30 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences around the solar disk.

Th.-F. Aug. 16-17 01:50-04:00 UT 00 S?T9 ne; C-14, 55
ne: stars of summer; Jupiter in the S. and SW.
C-14, 55: M22, M11 and R Scuti, Basl within the trapezium to the right of M11. (Basl is a small and rather loose open cluster.)
ph : photographed several areas of the sky using the 50mm lens and the 85mm lens. I also photographed the passage of the International Space Station which passed well north and east of the zenith. The ISS had just recently been visited by the crew of the Space Shuttle which included Dave Williams. It was still docked at the ISS.

Sa. Aug. 18 18:15-18:20 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Sa. Aug. 18 18:20-18:25 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences on the solar disk.



SC

Aug. 19
17:20 - 17:25 UT

2007 Su. Aug. 19 17:20-17:25 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T. O.F.

Su. Aug. 19 17:30-17:35 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - definite prominence at the 1 o'clock position on the disk, and hints of prominences elsewhere on the disk.

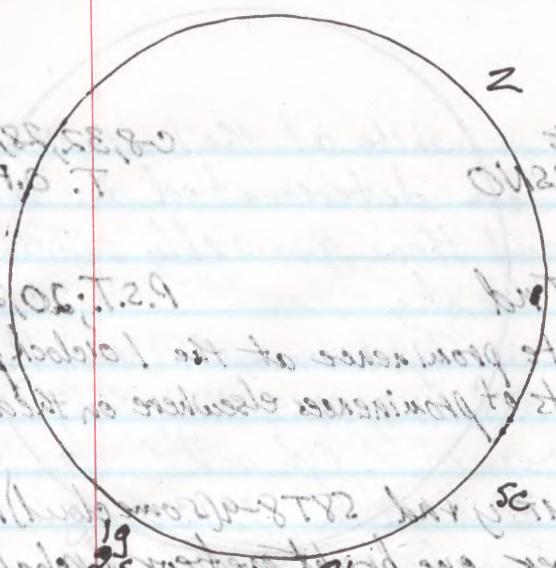
S.-M. Aug. 19-20 02:15-03:20 UT y nd 5 8 T 8-9 (some cloud) ne; 18X50sb
ne: stars of summer, one bright meteor probably from one of the active Aquarid meteor showers.

27 Messier objects

18X50sb: Neptune, M11 and R Scuti, M26, M16, M17, M18, M23, M24, M25, M8, M20, M21, M22, M28, U and EQ Del, M2, M15, M39, Kemble's Cascade, Kemble 2, M71, M27, M57, β Cygni, M10, M31, M32, M110, T CorBor, area of R CorBor but the star was probably not seen probably because of being near the fainter part of its cycle, M81, M82, IC 4665, Barnard's Star, M51, M103, NGC 7789, NGC 6633, NGC 663, NGC 654.

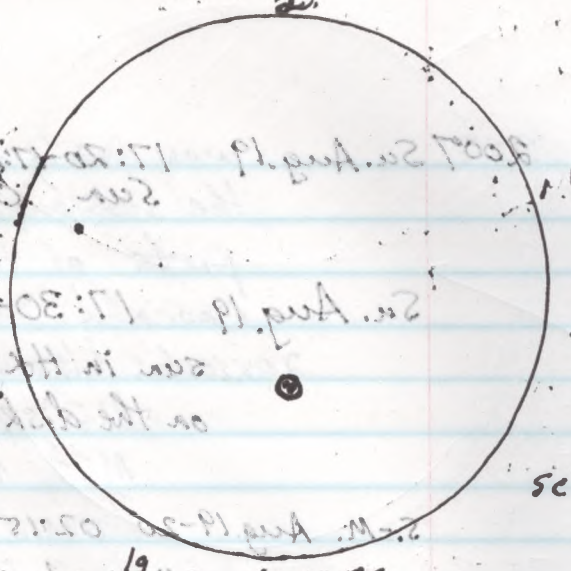
M-T. Aug. 20-21 02:55-03:50 UT y 5 ? T 8-9 (varied) ne; 18X50sb
ne: Stars of summer; one bright Perseid meteor at 03:11 UT approximately.

18X50sb: Uranus, Neptune, M2, M15, M11 and R Scuti, M26, NGC 6683, B103, M16, M17, M18, M24, M25, M22, M28, M31, M32, M33, M110, M13, M92, T CorBor, area of R CorBor, but it was faint, possibly near the lower range of its brightness, Kemble's Cascade, Kemble 2, area of ζ Oph and ζ Her, IC 4665, Barnard's Star and its area NGC 6633, M71, M27, M57, area of the previously announced nova in Vulpecula thought



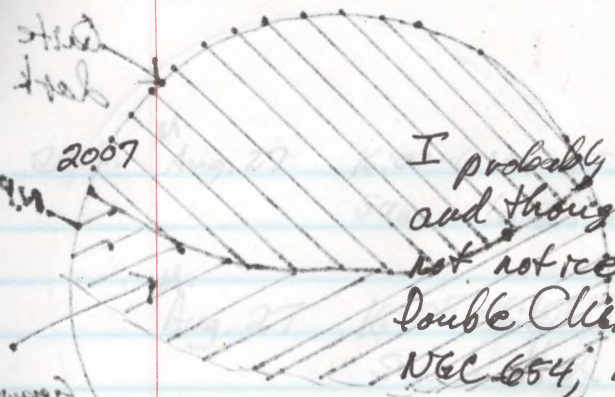
19
25
RSN12

Aug. 21
18:15–18:20 UT



19
25
RSN12

Aug. 26
19:00–19:05 UT



2007

I probably saw the same star I had seen before and thought was probably the nova, though I did not notice a change in its current brightness, Double Cluster in Perseus, Stock 2, NGC663, NGC 654, M103, NGC457, OC in Cassiopeia, M34, IC7789

Th. Aug. 21 18:15-18:20 UT t C-8, 32, 28, 20, 15.5 T.O.F.
sun lg 2s RSN12

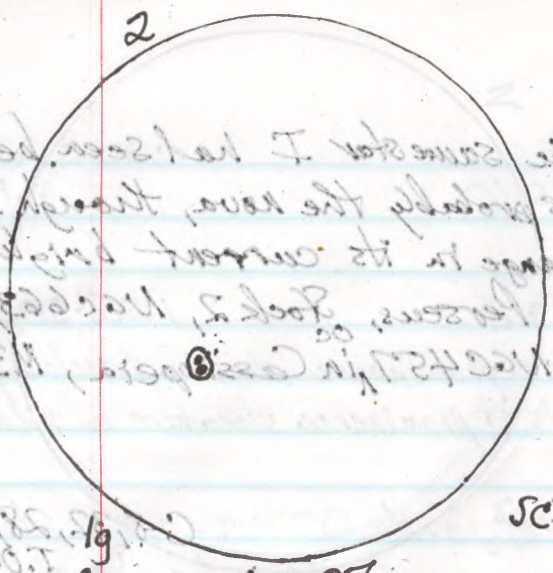
Tu. Aug. 21 18:20-18:25UT nd P.S.T.; 20, 28, 20E, 15.5
sun in HL - hints of prominences on the solar disk

T.-W. Aug. 21-22 03:00-03:40UT ~~cl~~ T5-8 (varied; cloud) ne; 18x50156
ne: stars of summer, several meteors, one probably a Perseid, two possibly Kappa Cygnids
18X50156: Uranus, M2, M15, M31, M32, M33, M110, M34, M103, NGC 7789, NGC663, NGC 654, NGC 457, Kemble's Cascade, Kemble 2, Double Cluster in Perseus, Stock 2, T Cor Bor, area of R CorBor but the star was probably in the lower part of its cycle and not seen with certainty; area of ζ Her and α Oph, M11 and R Scuti, M27, M57, M71, area of the recent nova in Vulpecula and the star which was possibly the nova appeared perhaps to be fainter than it had been - just slightly above the limiting magnitude of the binoculars; Col 399 - The Coathanger.

Su. Aug. 26 19:00-19:05UT t C-8, 32, 28, 20, 15.5 T.O.F.
sun lg 2s RSN12

Su. Aug. 26 19:05-19:10UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in HL - hints of prominences on the solar disk

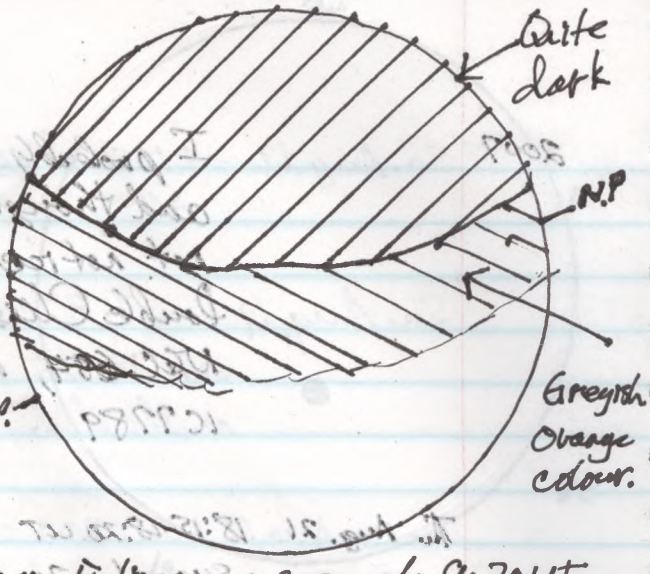
2



SC

19
25
KSN12

Aug. 27
16:00-16:05 UT



Lunar Eclipse as seen at 9:20 UT
(5:20 a.m. E.D.T.) naked-eye

Total Lunar Eclipse of 2007, Aug. 28.

P1 7:53:39 UT = 3:53:39 a.m. E.D.T.
U1 8:51:16 UT = 4:51:16 a.m. E.D.T.
U2 9:52:22 = 5:52:22
MOONSET LOCALLY 10:26 UT = 6:26 a.m. E.D.T.
Greatest Eclipse 10:37:22 UT = 6:37:22
U3 11:22:24 UT = 7:22:24 a.m. E.D.T.
U4 12:23:30 UT = 8:23:30
P4 13:21:01 UT = 9:21:01

B.A.T. : 8:38 UT = 4:38 a.m. E.D.T.
S.R. : 10:24 UT = 6:24 a.m. E.D.T.

2007. M. Aug. 27 16:00-16:05 UT t C8, 32
Sun lg 25 RSN 12 T.O.F.

M. Aug. 27 16:05-16:10 UT nd P.S.T.; 20
Sun in Hα - only hints of prominences on the solar disk

M.-T. Aug. 27-28 08:25-09:25 Periodically y two after 8:38 UT ne
Periodically I observed the beginning part of the Total Lunar Eclipse of 2007, August 28 (See times on chart at left) as follows:

8:25-8:30 UT (4:25-4:30 a.m. E.D.T.): Darkening of upper quarter of the lunar disk was noticeable for over 10 a.m. before B.A.T.

8:45-8:48 UT (4:45-4:48 a.m. E.D.T.) Darkening of upper half of the disk was very noticeable

8:51-8:58 UT (4:51-4:58 a.m. E.D.T.) Very dark at upper edge, as moon enters earth's penumbra at 8:51 UT. A rusty-orange colour is evident below this very dark upper edge

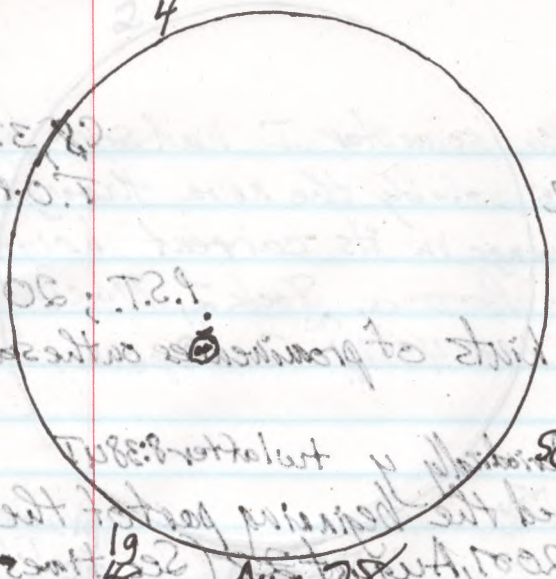
First 34 min. of Initial Partial phase of Total Lunar Eclipse seen.

9:05-9:10 UT (5:05-5:10 a.m. E.D.T.) Very dark upper quarter of the disk with dark rusty area below it and in the upper part of the moon from the dark area down to about the mid-point on the disk

9:20-9:25 UT (5:20-5:25 a.m. E.D.T.) Quite dark in the upper one-third of the disk and a greyish-orange colour from there down to over the mid-range of the disk. (See diagram.)

The N.P.-S.P. axis was tilted about 70° to the right, of course and the moon ranged from 20° to 16° above the WNW horizon. The sky was crystal-clear. After 9:25 UT (5:25 a.m. E.D.T.) The moon went into the trees at about 10° above the horizon. It would set an hour later at 6:26 a.m. E.D.T.). The view of part of the initial partial phase of the eclipse was excellent. Moonset would be 11 minutes before Greatest Eclipse.

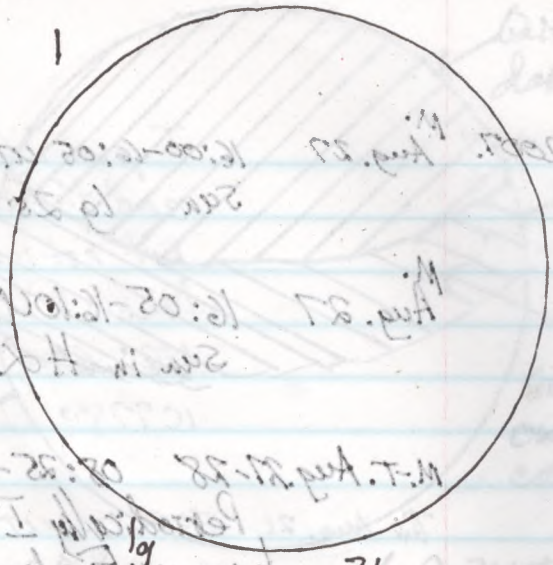
4



SC

19
45
RSN14
Aug. 28
19:45-19:50UT

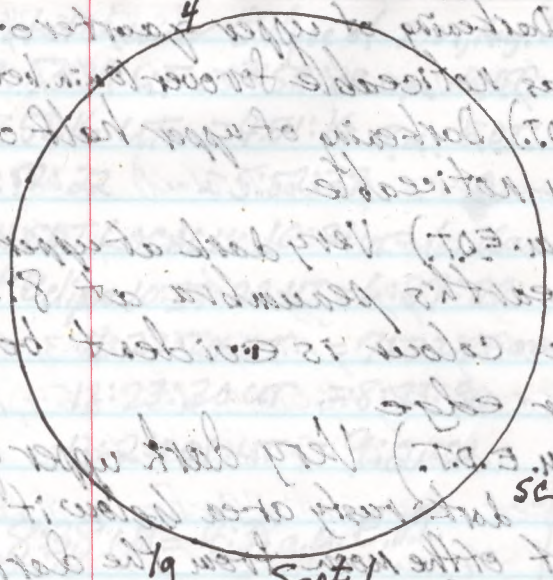
1



SC

19
15
RSN11
Aug. 31
18:10-18:15UT

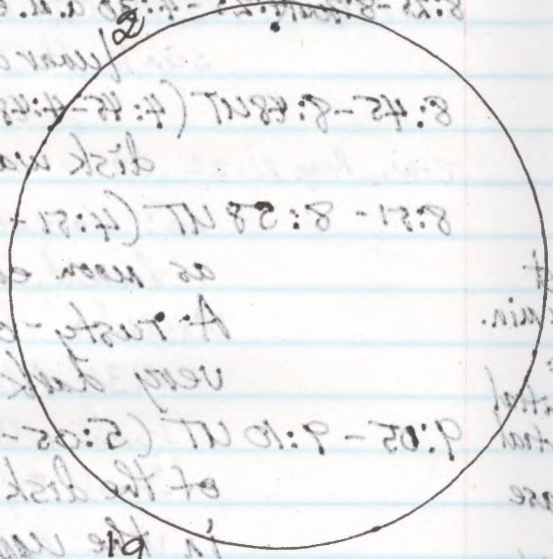
4



SC

19
45
RSN14
Sept 1
18:55-18:00UT

2



SC

19
25
RSN12
Sept. 2
17:05-17:10UT

2007 Tu. Aug. 28 19:45-19:50 UT t C-8, 32, 28, 20, 15.5
sun lg 4s RSN14 T.O.F.

Tu. Aug. 28 19:50-19:55 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα only hints of prominences on the solar disk.

F. Aug. 31 18:10-18:15 UT t C-8, 32, 28, 20, 15.5
sun lg 1s RSN11 T.O.F.

F. Aug. 31 18:15-18:20 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - some hints of prominences on the disk.

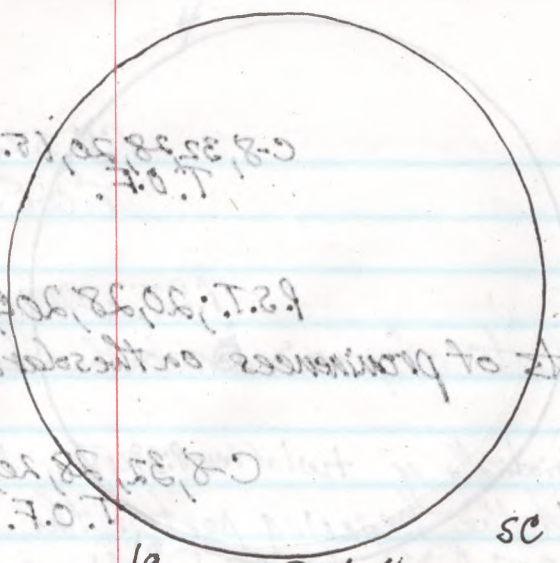
Sa. Sept. 1 17:55-18:00 UT t C-8, 32, 28, 20, 15.5
sun lg 4s RSN14 T.O.F.

Sa. Sept. 1 18:05-18:10 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of prominences on the solar disk.

Sa.-Su. Sept. 1-2 01:55-02:35 UT y S8(?)T7-8 (rising gibbous moon) ne; 18x50 1sb
ne: stars of summer
18x50 1sb: Neptune in Cap.; M8, M20, M21, M22, M28, M16, M17, M18, M23, M24, M25, M11 and RS Oph, M26, Col 399, M71, M27, β Cyg, M2, M15, M31, α Oph and area, ζ Her, IC 4665, Barnard's star and area, NGC 6633, IC 4756, M13, M92, probably glimpsed T Cor Bor which was quite difficult under the circumstances, area of R Cor Bor though the star was faint, Kemble's Cascade, Kemble 2, Double Cluster in Perseus, Stock 2.

Su. Sept. 2 17:05-17:10 UT t C-8, 32, 28, 20, 15.5
sun lg 2s RSN12 T.O.F.

Su. Sept. 2 17:15-17:20 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - definite, distinct prominence at the 8 o'clock position on the disk and hints of prominences elsewhere



lg
3s
RSN13

Sept. 4
17:45-17:50UT

SC

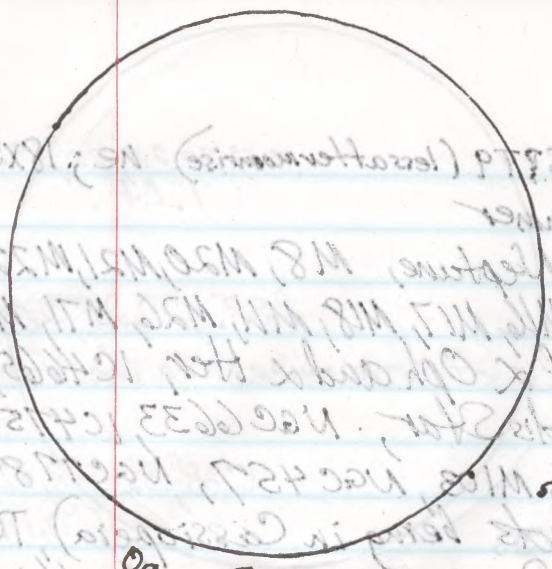
2007 S.-M. Sept. 2-3 01:45-02:55 UT y S?T9 (less after moonrise) ne; 18X50 1sb
ne: stars of summer
18X50 1sb: Uranus, Neptune, M8, M20, M21, M22, M28
M23, M24, M25, M16, M17, M18, M11, M26, M71, M27,
Col 399, area of α Oph and α Her, IC 4665,
area of Barnard's Star, NGC 6633, IC 4756,
NGC 663, NGC 654, M103, NGC 457, NGC 7789
(the last 5 objects being in Cassiopeia), T Cor Bor,
area of R Cor Bor, M13, M92, Kemble's Cascade,
Kemble 2, M2, M15, area of χ Persei, Double
Cluster, Stock 2.

M.-T. Sept. 3-4 02:10-03:25 UT y S?T9-7 (moon rise and some cloud deteriorating with) ne; 18X50 1sb
ne: stars of summer; 3 meteors, at least 2 of which
seemed to come possibly from Cygnus
18X50 1sb: Uranus, Neptune, M11 and RS Cen ti, M26,
Col 399, M71, M27, [redacted] Cyg, M57, M31, M33,
Kemble's Cascade, Kemble 2, Double Cluster,
NGC 654, NGC 663, NGC ~~654~~ 281, NGC 7789, M10,
M12, M14, Barnard's Star, M2, M15, and Alpha
Persei cluster of stars, M34, NGC 6633, ~~NGC 6756~~ IC 4756.

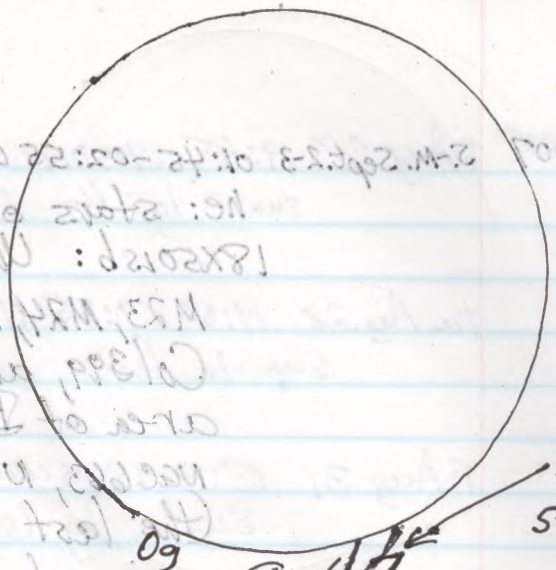
Tu. Sept. 4 17:45-17:50 UT t C8, 3Z, 28, 20, 15S
Sun lg 3s RSN13 T.O.F.

Tu. Sept. 4 17:50-17:55 UT P.S.T.; 20, 28, 20S, 15.5
sun in Her - hints of some prominences on the solar disk.

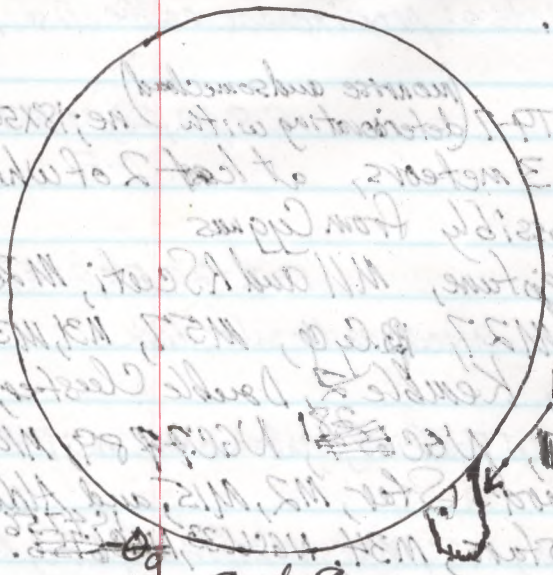
T.-W. Sept. 4-5 02:35-03:30 UT y S?T8-9 (varied) ne; 18X50 1sb
ne: stars of summer
18X50 1sb: Uranus, Neptune, M11 and RS Cen ti, M26,
T Cor Bor, area of R Cor Bor, area of
α Oph and α Her, IC 4665, Barnard's Star
and area, NGC 6633, IC 4756, M13, M92,



Og
Os Sept. 6
RSNO 17:05-17:10UT



Og
Os Sept. 7
RSNO 20:00-20:05UT



Og
Os Sept. 8
RSNO 17:35-17:40UT

2007, Double Cluster in Perseus, Stock 2, α Persei Association, M34, area of NGC 891 but not sure of seeing it, areas of Cassiopeia including NGC 663, NGC 654, M103, NGC 281, NGC 7789, M52. I also saw a tumbling satellite that gave a 'flash of light approximately on 8 to 9 second intervals. It probably would not have been detected without the binoculars.

Th. Sept. 6 17:05-17:10 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

Th. Sept. 6 17:15-17:20 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of several prominences on the disk.

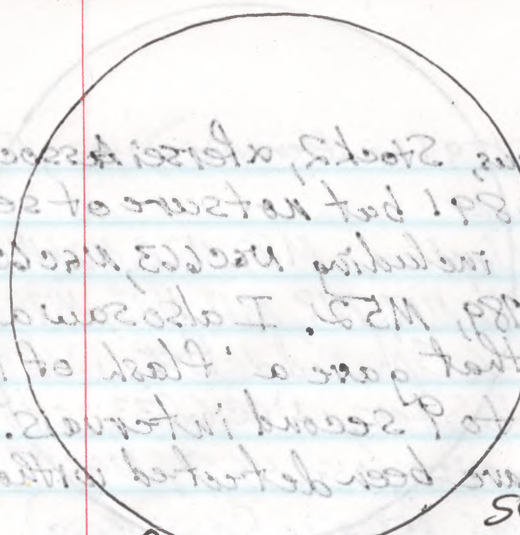
F. Sept 7 20:00-20:05 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

F. Sept. 7 20:05-20:10 UT nd A.S.T.; 20, 28, 20E, 15.5
sun in Hα - one definite prominence at about the 5 o'clock position on the disk (See diagram) and other hints of prominences on the disk.

Sa. Sept. 8 17:35-17:40 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F

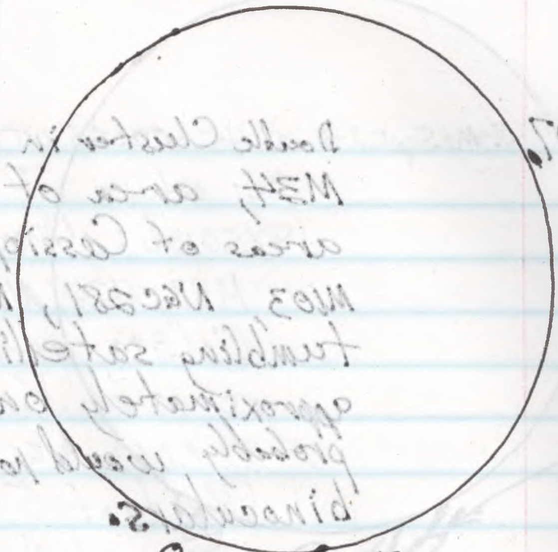
Sa. Sept. 8 17:45-17:50 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - one definite prominence at the 4 o'clock position on the disk (See diagram.) and other hints of prominences.

Sa-Su. Sept. 8-9 02:50-03:55 UT y S 7-8 (Clouds varied.; N) ne; 18X50156
ne: stars of summer.
18X50156: Uranus, Neptune, M11 and R Scuti, Col 399,



SC

Og
OS
RSNO
Sept. 10
18:40-18:45 UT



SC

Og
OS
RSNO
Sept. 12
19:00-19:05 UT

2007 M71, M27, BCyg, M57, area of α Oph, Barnard's E in Aquila, IC4665, Barnard's Star and area, Taurus Poutrowsky, NGC6633, IC4756, θ Ser (Alya) - a beautiful double stars, split in the binoculars, and just E of IC4756, M13, M92, Kemble's Cascade, Kemble 2, α Persei group, Double Cluster in Perseus, Stock 2 - The Musketeer Cluster, NGC 752; M31, M32, M110, M33, NGC 654, NGC 663, M103, NGC 457, probably M52 since I observed objects to the NW from β Cas, NGC 7789, M13, M92, Helix Nebula in Aquarius.

θ Ser - beautiful double

S-M. Sept. 9-10 03:20-04:35 UT y S.T 7-9 (varied) ne; 18X50 lsb

ne: stars of late summer.

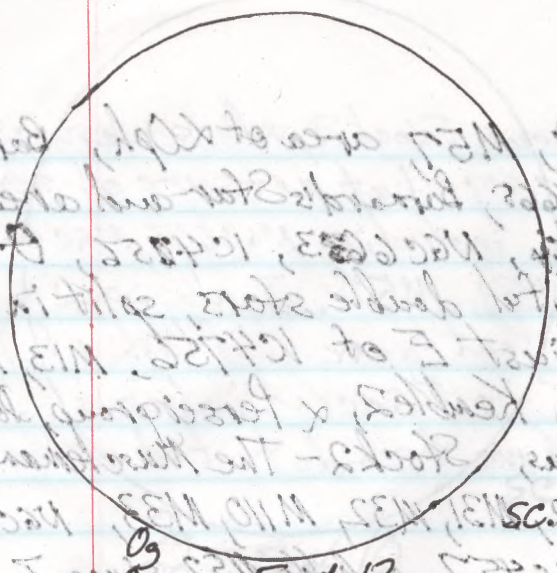
18X50 lsb: Uranus, Neptune, M2, M15, area of α Oph and α Her, IC4665, area of Barnard's Star and the star, NGC6633, IC4756, Theta Ser, Col 399, M71, M27, M57, BCyg, M39, M34, Kemble's Cascade, Kemble 2, NGC663, NGC654, M103, NGC457, NGC 281, NGC7789, M52, M30, the Helix Nebula, the Pleiades, NGC 752.

M. Sept. 10 18:40-18:45 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

M. Sept. 10 18:45-18:50 UT nd P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences at various points around the solar disk.

W. Sept. 12 19:00-19:05 UT t C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

W. Sept. 12 19:10-19:15 UT nd P.S.T.; 20, 28
Sun in Hα - hints of slight prominences on the disk



Sept. 13
19:45-19:50 UT

2007 W.-Th. Sept. 12-13 01:35-04:05 UT 00 S?T6-9S (varied) ne; 20x100b; C-14,55

ne: stars of summer and autumn; 2 meteors.

20x100b: Uranus, Neptune, M11 and RScuti, M26, TCorBor, area of RCorBor, area of ζOph, IC4665, Barnard's Star and area, NGC 6633, IC4756, the double star δSerpentis - which was easily split, the nearby "double-double" which is known as "Tweedledum and Tweedledee" - not definitely split, though it may have appeared slightly elongated. (See U205 and U250.) M31, M32, M110, M33, M34, Levy 53 (NGC752), Double Cluster in Perseus, Stock 2 (the Muscleman Cluster), Kemble's Cascade.

C-14,55: M13, M57.

Th. Sept. 13 19:45-19:50 UT t C-8,32,28,20,15.5

sun Og Os RSNO T.O.F.

Th. Sept. 13 20:30-20:35 UT nd, y P.S.T.; 20,28,20E,15.5.

sun in Hα - some hints of prominences on the disk

Th.-F. Sept. 13-14 02:25-03:45 UT y S?T8.5-9.5 varied, better near zenith ne; 18x50b

ne: stars of autumn; one meteor

18x50b: Uranus, Neptune, M11 and RScuti, Col399, M27, βCyg, M57, M27, M39, ψDraconis - a beautiful double star, M81, M82, Kemble's Cascade, Kemble 2, Double Cluster in Perseus, Stock 2, NGC654, NGC663, M103, NGC457 - the E.T. Cluster, NGC281, M52, NGC7789, M31, M32, M110, M33, NGC752, αPersei Group of stars, Pleiades rising out of the trees, Helix Nebula, M30, M34, area of αOph and αHer, IC4665,

2007

Barnard's Star and area, Taurus Poniatowski and area, NGC 6633, IC 4756, Theta Serpentis - split very nicely (!), the star known as "Tweedledee and Tweedledum" because it is actually a "double double" whose secondary doubles are amazingly similar in magnitudes, position angles and separations. Even the "primary double" is very close, at about 2.2 arc seconds, and difficult to separate except in a large telescope. This "double-double" star is located about 1/3 of the distance between IC 4756 and Theta Serpentis (Alya) or about 1 degree E. of IC 4756. It is labelled on MSA Chart 1270; the Polar Ring of stars near Polaris. It is called The Engagement Ring in Gary Seronik's book "Binocular Highlights, page 34½; Barnard's E - described in the same book on page 65 - located W. of Altair in the constellation Aquila; TCorBor, area of R CorBor, Helix Nebula; M30, M2, M15

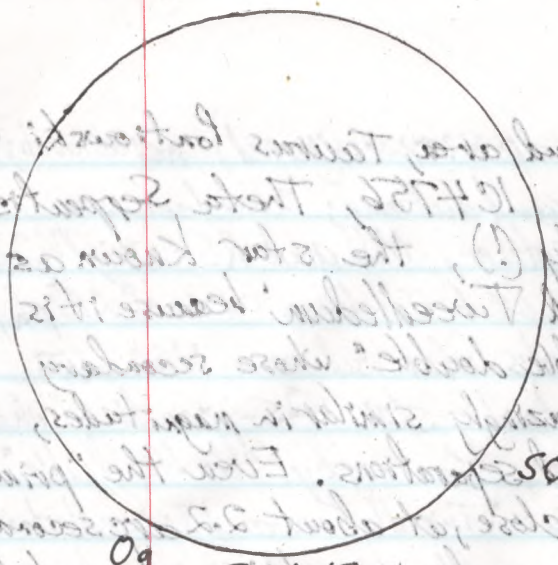
Tweedledee and Tweedledum

Polar Ring of stars

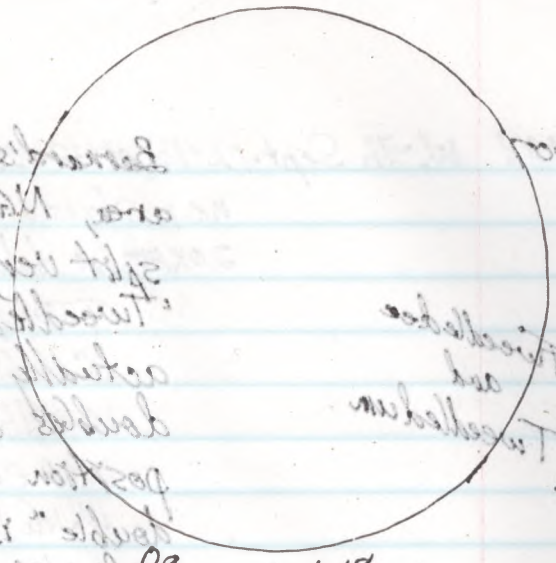
S.-M. Sept. 16-17 03:05-04:00 UT y 5?T8-9(varied) ne; 18x50 sb

ne: stars of autumn

18x50 sb: Uranus, Neptune, M2, M15, M30, Helix Nebula, U and EU Del, Col 399, M71, M27, M57, β Cyg, M39, area of α Cygni, area of α Oph and α Her, IC 4665, NGC 6663, IC 4756, beautiful double star Theta Seppentis, nearby "Tweedle dee and Tweedle dum, M13, M92, Kemble's Cascade, Kemble 2, beautiful double star 4 Draconis not far from Kemble 2, wide double star ν Draconis, M13, M90, Double Cluster in Perseus, Stock 2, NGC 654, NGC 663, M103, NGC 457



09
05 Sept. 17
RSNO 17:40-17:45 UT



09
05 Sept. 18
RSNO 17:45-17:50 UT

2007 NGC 281, NGC 77-89, M34, M31, M32, M110, M33, area of Capella and "The Kids", Pleiades, the Polaris Ring of Stars, Barnard's E near Altair. μCep and other areas of Cepheus.

M. Sept. 17 17:40-17:45 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

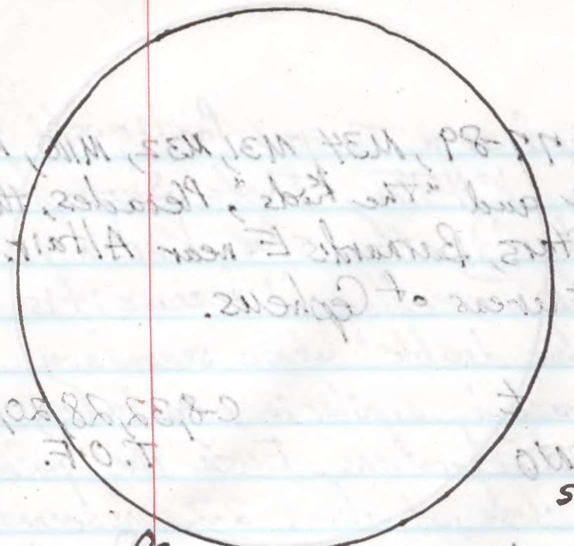
M. Sept. 17 17:55-18:00 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - only hints of prominences on the solar disk.

M.-T. Sept. 17-18 03:20-04:05 UT y 5?T9 (later 8 in the W.) ne; 18X50156
ne: stars of autumn, Mars amid trees in the E.
18X50156: Uranus, Neptune, M2, M15, M30, Helix Nebula, Col 399, M71, M27, β Cyg, M57, IC4665, NGC6633, IC4756, the star called Tweedledee and Tweedledum, Theta Serpentis - DS - nicely split; M13, M92, ν Draconis DS; ψ Draconis - split; Kemble 2, α Persei group, Kemble's Cascade, Double Cluster in Perseus, Stock 2, NGC663, NGC 654, M103, NGC 457 - the ET cluster, NGC 281, NGC 7789, M52, Levy 53 (NGC 752), M31, M32, M110, Pleiades.

Tu. Sept. 18 17:45-17:50 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

Tu. Sept. 18 17:50-17:55 nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of some prominences on the solar disk.

T.-W. Sept. 18-19 01:20-03:40 UT 00 5?-8 T8-9.5 varied ne; 18X50156; 20X100b
ne: Having briefly observed the First Quarter Moon with 20X100b binoculars in twilight at 23:35 UT, I observed the stars of autumn and saw one fast meteor.
18X50156: Uranus, Neptune, M11 and R Scuti, M26,



Og
O5
RSN6
Sept. 19
19:00–19:05 UT

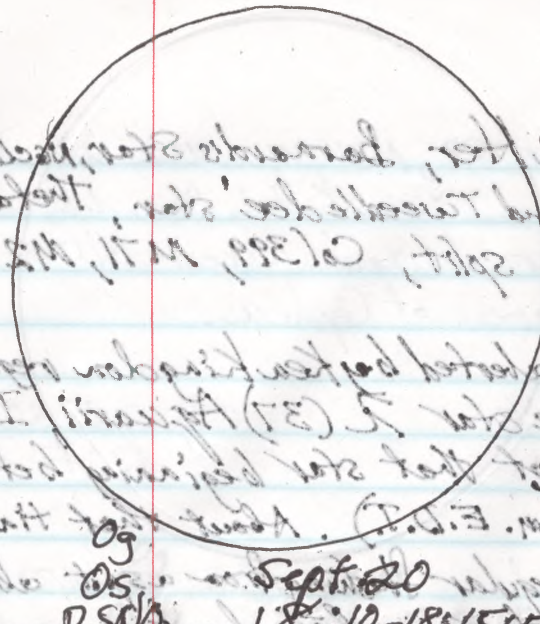
2007. area of δ Oph and ζ Her, Barnard's Star, NGC 6633, IC 4756, 'Tweedle dum and Tweedle dee' star, Theta (Θ) Serpentis - DS. - nicely split, Col 399, M 71, M 27, ★ β Cyg.

20×100b: Having been alerted by Ken Kingdon regarding a satellite near the star ζ (37) Aquarii, I observed the area of that star beginning before 01:40 UT (9:40 p.m. E.D.T.). About that time I noticed a fairly regular flashing from a spot about ¼° SSE of that star - perhaps about every 4 or 5 seconds. After about 2 minutes the flashes seemed to be less frequent, but they did continue for a while. I watched until about 02:00 UT (10:00 p.m. E.D.T.). The moon set about 02:22 UT. I also observed Barnard's E near Altair, IC 4665, Barnard's Star, Θ Serpentis - split nicely, T CorBor, area of R CorBor which was much fainter than when seen at maximum; M13, M92, ν Draconis - DS - split extremely easily; tried but did not seem to be able to split the double star o Draconis - perhaps because of the difference in magnitude; ψ Draconis - DS - split easily; Kemble 2; χ Persei cluster, M34, Levy 53 (NGC 752); Double Cluster in Perseus, Stock 2 (the Muscleman cluster); NGC 663, NGC 654, M103, NGC 457 (the 'E.T. Cluster in Cas.'); NGC 281, NGC 7789, M52, M31, M32, M110, M33, M2, M15; Barnard's E near Altair.

Flashing from a satellite - near ζ Aquarii

W. Sept. 19 19:00 - 19:05 UT & Sun Cg Os RSNO C-8, 32, 28, 20, 15.5 T.O.F.

W. Sept. 19 19:05 - 19:10 UT nd Sun in Hα - hints of prominences around the disk P.S.T.; 20, 28, 20E, 15.5



Og
Os
RSNO

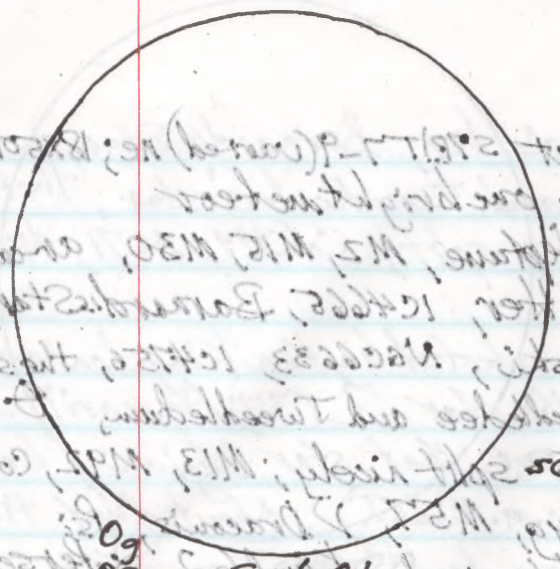
Sept. 20
18:12-18:15 UT

2007 W.-Th. Sept. 19-20 01:35-03:00UT 5?P.|T7-9(varied) ne; 18x50IS6
ne: stars of autumn; one bright meteor
18x50ISb: Uranus, Neptune, M2, M15, M30, area of α Oph and ~~Ω~~ Her, IC4665, Barnard's Star, Taurus Poniatowski, NGC6633, IC4756, the star known as Tweedledee and Tweedledum, θ Serpentis - DS - split nicely, M13, M92, Col399, M71, M27, β Cyg, M57, ν Draconis, Psi Draconis - split nicely, Kemble 2, α Persei group of stars, M34, Levy 53 (NGC 752), Double Cluster in Perseus, Stock 2 (The Muscleman cluster), Kemble's Cascade, NGC 654, NGC 663, NGC 457 (The E.T. Cluster), NGC 281, NGC 7789, M52, M103, ψ Draconis - D.S. split nicely, M31, M32, M110, M33, Barnard's E in Aquila, M81, M82.

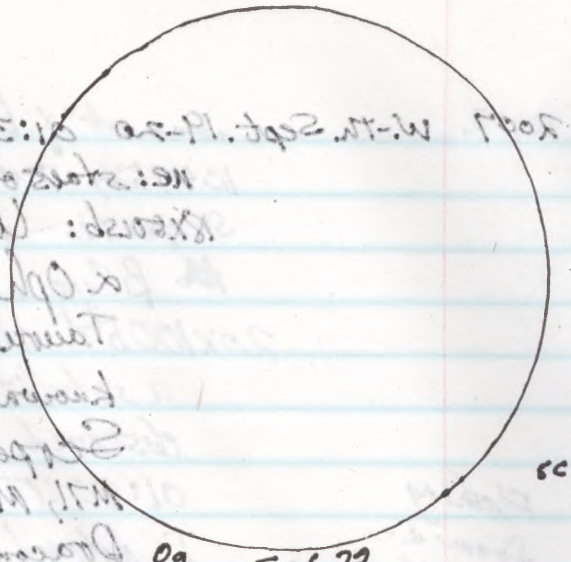
Th. Sept. 20 18:10-18:15 UT t C-8, 32, 28, 20, 155
sun 0g 0s RSN 0 T.O.F

Th. Sept. 20 18:15-18:20 UT nd P.S.T.; 20, 28, 20E, 155
sun in Hα - hints of prominences on the disk

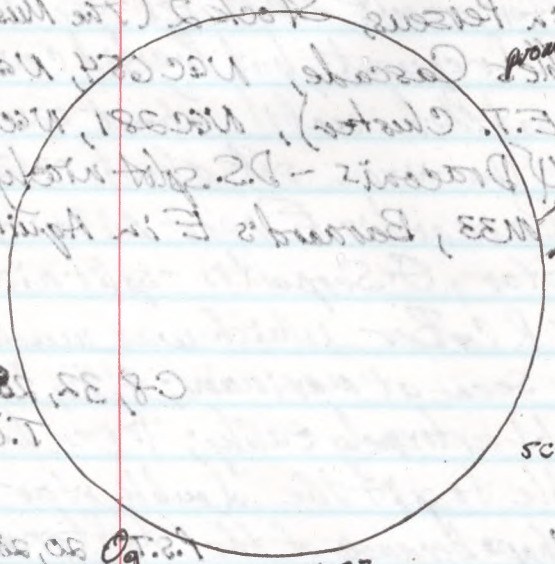
Th.-F. Sept. 20-21 03:40-05:00 UT y 5?T8-9.5! (better after moonset at 04:12 UT) ne; 18x50IS6
ne: stars of autumn, one meteor, Mars rising in the E.
18x50ISb: Uranus, Neptune, M2, M15, M30, Helix Nebula, Col399, M71, M27, β Cyg, M57, ε Lyrae, M39, NGC 6633 ν Draconis - DS, ψ Draconis - DS - easily split, Kemble 2, α Persei Group of stars, M34, μ Cep, δ Cep, NGC654, NGC 663, M103, M 457 (The E.T. Cluster), NGC281, M52, NGC 7789, M31, M32, M33, M110, Levy53 (NGC 752), Kemble's Cascade, Double Cluster in Perseus, Stock2 (The Muscleman Cluster), M36, M37, M38.



Og
OS
RSNO
Sept. 21
18:00-18:05 UT



Og
OS
RSNO
Sept. 22
18:50-18:55 UT



Og
OS
RSNO
Sept. 23
18:15-18:20 UT

2007 F. Sept. 21 18:00-18:05 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

F. Sept. 21 18:05-18:10 UT nd P.S.T.; 20 28, 20E, 15.5
sun in Hα - hints of prominences on the solar disk

Sa. Sept. 22 18:50-18:55 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

Sa. Sept. 22 18:55-19:00 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - hints of prominences on the solar disk

Su. Sept. 23 18:15-18:20 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

Su. Sept. 23 18:20-18:25 UT P.S.T.; 20, 28, 20E, 15.5
sun in Hα - one distinct prominence near 3 o'clock position
according to the eyepiece field orientation (see diagram.)

M. Sept. 24 19:30-19:35 UT t C-8, 32, 28, 20, 15.5.
sun Og Os RSNO T.O.F.

M. Sept. 24 19:35-19:40 UT nd P.S.T.; 20, 28, 20E, 15.5
sun in Hα - some hints of prominences on the disk.

M-T. Sept. 24-25 03:10-03:20 UT nd s?T3 (gm) ne; 18x50 15.6
ne: Under a very bright gibbous moon, only about 40 hours before Full Moon, I observed the stars of the Summer Triangle and a few other stars.
18x50 15.6: Double Cluster in Perseus, α Persei group of stars, Kemble's Cascade, Kemble 2 in Draco, ψ Draconis - DS - easily split, stars of Lyra, Alcor and Mizar, the features on the very bright lunar disk.

2007 F. Sept. 21 18:00-18:05UT t — C-8, 32, 28, 20, 15.5
T.O.F.
Sun Og Os RSNO

F. Sept. 21 18:05-18:10UT ad — P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences on the solar disk.

Sa. Sept. 22 18:50-18:55UT t — C-8, 32, 28, 20, 15.5
T.O.F.
Sun Og Os RSNO

Sa. Sept. 22 18:55-19:00UT ad — P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - hints of prominences on the solar disk.

Su. Sept. 23 18:15-18:20UT t — C-8, 32, 28, 20, 15.5
T.O.F.
Sun Og Os RSNO

Su. Sept. 23 18:20-18:25UT — P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - one distinct prominence near 3 o'clock position according to the Eyepiece field orientation (see diagram.)

M. Sept. 24 19:30-19:35UT t — C-8, 32, 28, 20, 15.5
T.O.F.
Sun Og Os RSNO

M. Sept. 24 19:35-19:40UT ad — P.S.T.; 20, 28, 20E, 15.5
Sun in Hα - some hints of prominences on the disk.

M-T. Sept. 24-25 03:10-03:40UT ad s.T.S.(yard) — Ne; 18x50IS b

Ne: Under a very bright gibbous moon, only about 40 hours before Full Moon, I observed the stars of the Summer Triangle and a few other stars.

18x50IS: Double Cluster in Perseus, α Persei group of stars, Kemble's Cascade, Kemble 2 in Draco, ν Draconis - DS - easily split, stars of Lyra, Alcor and Mizar, the features on the very bright lunar disk.

Relative Sunspot Numbers

Date 2007	My Observation
Apr 21	0
22	0
24	0
29	19
30	17
2500	
May 3	19
4	19
5	20
6	15
7	12
8	0
10	15
13	15
14	25
18	20
2510	
19	21
21	14
22	12
23	11
24	0
25	0
26	0
29	11
June 8	25
9	24
2520	
10	24
12	13
13	0
14	0
15	0
17	0
21	0
22	0
23	0
24	0
2530	
25	11
26	12
30	14
July 2	17
3	12
12	18
15	29
16	26
17	25
18	14
2540	
21	0
22	0
23	0
25	0
26	0
27	0
30	0
31	0
Aug. 1	0
2	0
3	0
4	11
6	12
8	14
9	12
10	11
11	11
12	0
13	0
14	0
2560	
15	0
16	0
18	0
19	0
21	12
26	12
27	12
28	14
31	11
Sept. 1	14
Sept. 2	12
4	13
6	0
7	0
8	0
10	0
12	0
13	0
17	0
18	0
2580	
19	0
20	0
21	0
22	0
23	0
24	0

Relative Sunspot Numbers

Date 2001	My Observation
April 21	0
23	0
27	0
29	10
30	17
May 3	10
4	20
6	15
7	10
8	15
13	12
15	0
18	15
21	25
22	17
23	0
24	0
25	0
26	0
29	0
June 2	24
5	0
7	0
12	0
17	0
21	0
22	0
23	0
25	0
30	17

Date 2001	My Observation
July 2	17
3	18
12	18
15	29
16	26
17	25
18	17
22	0
23	0
25	0
26	0
27	0
30	0
Aug. 1	0
2	0
4	0
6	15
8	17
9	15
10	0
13	0
15	0
16	0
18	0
20	0
21	15
26	17
29	17
Sept. 1	17

Date 2001	My Observation
Sept. 4	12
7	13
8	0
9	0
10	0
12	0
13	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0

TELESCOPE MAGNIFICATION

OCULAR in	C-14(3910^{m}FL)	C-8(2000^{m}FL)	ASTROSCAN(445^{m}FL)
55mm	71 X	36.4 X	
40	97.8	50	11.1 X
36	108.6	55.6	12.4
32	122.2	62.5	13.9
28	139.6	71.4	15.9
26	150.4	76.9	17.1
25	156.4	80	17.8
21.5	181.9	93	20.7
20	195.5	100	22.3
19	205.8	105.3	23.4
18	217.2	111.1	24.7
17	230	117.6	26.2
15.5	252.3	129	28.7
15	260.7	133.3	29.7
13	300.8	153.8	34.2
12.7	307.9	157.5	35
12.5	312.8	160	35.6
12	325.8	166.7	37.1
9	434.4	222.2	49.4
8.8	444.3	227.3	50.6
8	488.8	250	55.6
7.4	528.4	270.3	60.1
7	558.6	285.7	63.6
5	782	400	89
4	977.5	500	111.3

TELESCOPE PARAMETERS

	C-14	C-8	Astroscan
FL	3910mm	2000mm	445 mm
D	354 mm	200 mm	105 mm
f/	f/11	f/10	f/4.24

USEFUL MAGNIFICATION (0.2D to 2D)

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

STELLAR MAGNITUDES FOR COMPARISON PURPOSES

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