

Volume
25

August 22, 2005
to
March 15, 2006

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Hilroy

25

Leo Enright
Observing Log

Aug. 22, 2005 - Mar. 15, 2006

140

Pages

26.7 x 20.3 cm

I SUBJECT NOTEBOOK
CAHIER I SUJET



05553

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AAVSO

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2005

May, 2004

- C \oplus - May 7: 0.92 AU
- perihelion May 15: 0.86 AU

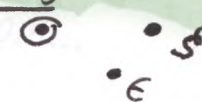
10 A.U. - Aug. 20

C/2001 Q4 (NEAT) - d. Palomar, 2001, Aug. 24.


- near M44 on May 14 and 15.

- near

Sat
5
1407
12
414
19
421

δ Cep: Pulsating 

5.36m E - 4.2
3.5-4.4 S 3.6

B Lyrae: Eclipsing 

Slides

- near S

- peak

- May 6 - near

getting h

- May 15 - near

- until May 22

- until September

C/2002 T7 (LINEAR)

- perihelion

- C \oplus : d

- near

109-3

- 1033-4

- 10

- 103

- 104

- 105

- 107

- 108

- 112

108-

1-

1.5-

2-

2

2006
Mar. 9. (For meeting of Mar. 10)

Since last meeting on Feb. 10

Observations: 44 (19 pages + 7 sketches)

late evening: 21 (6)

early morning: 23 (4)

Mars Aries \rightarrow Pleiades - Ald 70

- changing crescent of Venus

- Jupiter in Libra

- Feb 17-18 Moon - Spica - NOT a

Observing Log

Code:

Year Day Date Time

Place

Sky Conditions:

S=Seeing T=Transparency Instruments

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

Sky Conditions:

S=Seeing T=Transparency

0-10 scale: 0 = nil or poor

10 = absolutely superb

cml = crescent moonlight

gml = gibbous moonlight

fml = full moonlight

Instruments:

C-14 = Celestron 14 - 355 cm SCT

C-8 = Celestron 8 - 20 cm SCT

Ast = Astroscan 2001 - 10.5 cm RFT

12½" = Denise's 32 cm Meade Dobsonian

20x100b = Celestron 20x100 binoculars

11x80b = 11x80 binoculars

9x63b = 9x63 binoculars

7x35b = 7x35 binoculars

18x50 IS b = Canon 18x50 IMAGE STABILIZED binoculars

P.S.T. = Coronado Personal Solar Telescope

32 = 32 mm ocular

32-2 = 32 mm 2" ocular

K = Kellner

O = Orthoscopic

Ko = König

WA = Wide Angle

P = Plössl

ph = photography

p/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

EG = Elliptical Galaxy

DS = Double Star

LPV = Long Period Variable

Atlases:

U = Uranometria 2000.0

U 210 = Uranometria 2000.0 Chart 210

AAUSO = AAUSO Variable Star Atlas

Cam = Cambridge Star Atlas (2000)

MSA = Millennium Star Atlas

2005 Su. Aug. 21 15:00-15:10 UT nd

PST, 20, 19, 17, 15, 5, 15_n²⁰

Sun - not sure of seeing prominences; Sharp view of one major sunspot group near the 7 o'clock position as seen in the field.

S.M. Aug. 21-22 02:35-03:30 UT y S6(?) T4-5 (gml) ne

- Hoping possibly to see some meteors, I observed with a very bright waning gibbous moon in the SE sky. Near the end of the session, there seemed to be some increasing cloud in the NE. I saw some of the bright stars of summer, with the Summer Triangle overhead.

M. Aug. 22. 16:05-16:10 UT t

Sun 29 34 s RSN 54

C-8, 32

T.O.F.

M.-T. Aug. 22-23 02:20-03:20 UT y+nd S9(?) T6-7 (gml) ne; 18x50 sb

ne: bright stars of summer; one meteor in Pegasus.

18x50 sb: M11 and R Scuti, M16, M17, M18, M8, M20, M21, M22, area of Neptune in Capri; possibly area of Uranus in Aquarius; Kemble's Cascade, Kemble 2; Barnard's Star and area, IC 4665, R Cor Bor., T Cor Bor., M13, M92

T. Aug. 23 14:45-14:50 UT t

Sun 29 32 s RSN 52

C-8, 32

T.O.F.

W. Aug. 24 15:05-15:10 UT t

Sun 19 19 s RSN 29

C-8, 32

T.O.F.

W. Aug. 24 15:20-15:30 UT nd

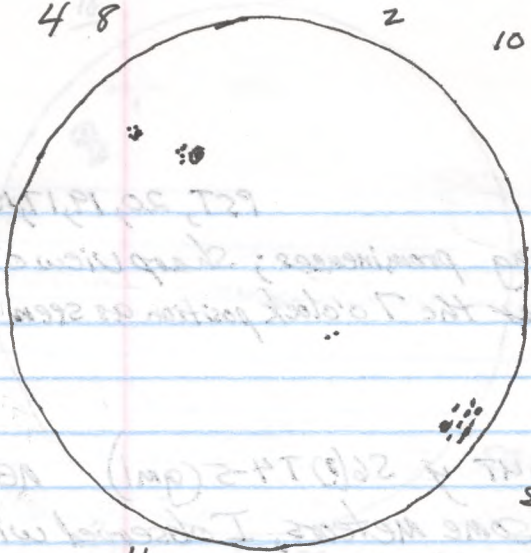
PST, 20, 19, 15, 5, 15, 12.

Sun - no prominences seen - good view with the 12 mm ocular which would have been 33.3X.

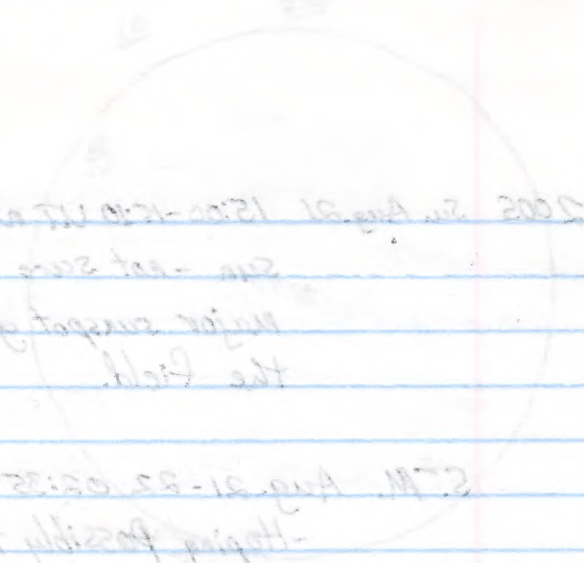
48

2

10



49
245
RSN64 Aug. 25
16:10-16:15 UT



increasing cloud in the A/E. I saw some of the
bright stars of summer with the summer triangle
overhead.

M. Aug. 23. 16:02-16:10 UT
Sun 3p 342 RSN124

M. Aug. 23. 02:20-03:00 UT
No bright stars of summer; one meteor in papers.
18:20:15: M110 RSN124; M110 M110 M110 M110
M13; group of M13 stars in Cyg; possibly
group of M13 stars in Cyg; possibly
Rigel, Tarant, M13 M13

T. Aug. 23. 14:42-14:50 UT
Sun 3p 322 RSN124

W. Aug. 24. 12:02-12:10 UT
Sun 1p 192 RSN124

W. Aug. 24. 18:00-18:30 UT
Sun - 10 minutes seen - good view with the 12 mm
order with number 333X

2002 20 Aug 21 12:00-12:10 UT
Sun - not sure of seeing prominence; 2 spots in
major crescent group near the 7 o'clock position as seen in
the field.

27M. Aug. 21-22. 02:32-03:00 UT
-Hoping possibly for some M13 stars
seen very bright morning gibberish
near the end of the session, there
be some

M. Aug. 23. 16:02-16:10 UT
Sun 3p 342 RSN124

M. Aug. 23. 02:20-03:00 UT
No bright stars of summer; one meteor in papers.
18:20:15: M110 RSN124; M110 M110 M110 M110
M13; group of M13 stars in Cyg; possibly
group of M13 stars in Cyg; possibly
Rigel, Tarant, M13 M13

T. Aug. 23. 14:42-14:50 UT
Sun 3p 322 RSN124

W. Aug. 24. 12:02-12:10 UT
Sun 1p 192 RSN124

W. Aug. 24. 18:00-18:30 UT
Sun - 10 minutes seen - good view with the 12 mm
order with number 333X

2005 W-Th. Aug. 24-25 02:05-03:05 UT nd + y S8 (P) T 9.5-7_A ne; 18x5015b
(afternoon rise)

Some
Aurora

ne: After observing vertical auroral bands at about 01:30 to 01:40 UT, I started observing at about 15 minutes after the end of astronomical twilight and hoped that the auroral activity would continue, but after about 10 minutes it died down considerably and I took only 2 photographs. A fairly faint glow continued in the N. but it was not an active aurora for the rest of the session. The sky brightened after moonrise at about 02:30 UT. I saw the Milky Way very well and the bright stars of summer.

18x5015b: M11 and R Scuti, M16, M17, M18, M24, M25, M20, M21, M22, M28, M2, M15, M31, Neptune and its area in Capricornus
ph: photographed the aurora - 2 photographs.

Th. Aug. 25 16:10-16:15 UT t C-8, 32
sun 4g 245 RSN64 T.O.F.

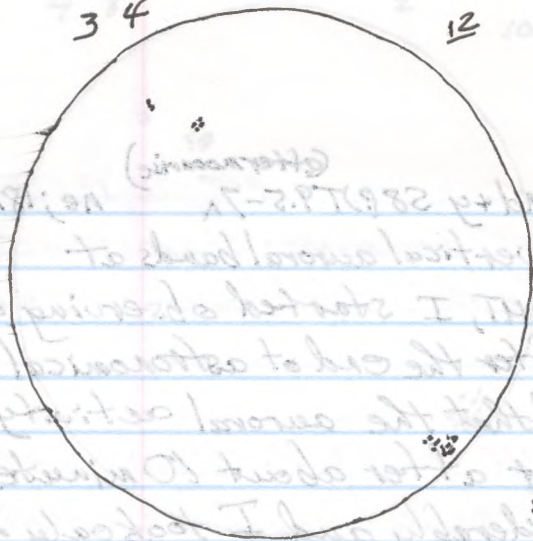
Th. Aug. 25 16:30-16:40 UT nd P.S.T., 20, 19, 8, 7.4
sun - did not notice any major prominences.

Th.-F. Aug. 25-26 00:20-01:30 UT on dock, A twl ne
at John Vandesanders place
- Hoping to observe Jupiter and Venus low in the W. and about 7° apart, I went to John Vandesanders dock, having talked to him about it earlier in the day. During twilight, some bright stars in the northern part of the sky became visible, but a large cloud low in the W. prevented my seeing Jupiter and Venus. The clouds seemed not to be moving, or at least to move extremely

- clouded out
from seeing
Jupiter and Venus

34

12



39

19c

RSN 49

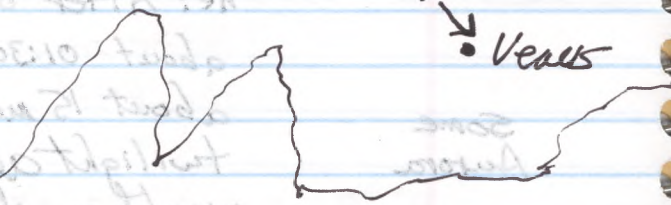
Aug. 26

15:25-15:30 UT

5c

Jupiter

Venus



2005, Aug. 26-27, 00:30 UT - Uras to
 W. showing Jupiter and Venus, about 3/4 ^{min} ^{5:00} after.

RSN 49: M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100.

G-8, 32
 T.O.F.

To Aug. 26 15:10-15:12 UT
 RSN 49

In Aug. 27 15:30-15:40 UT
 RSN 49

TR-F Aug 26-27 00:30-01:30 UT
 hoping to observe Jupiter and Venus low in the W.
 and about 7:00 PM, I went to John Vanderkoope
 back, having talked to him about it earlier in the
 day. During twilight some bright stars in the
 northern part of the sky became visible, but
 a large cloud bank in the W. prevented any
 seeing Jupiter and Venus. The clouds seemed
 not to be moving, or at least to move extremely

Jupiter
 from seeing
 cloud out

2005

slowly. I pointed out to John where he might find M31, since he was interested in seeing it. I left, hoping to be able to see, and to photograph, the planets Jupiter and Venus during the coming week, as they approach one another in the evening sky.

02:35-02:50 UT y 54 (poor) T (considerable cloud) ne
In spite of poor seeing and mediocre transparency in many parts of the sky, I saw the Summer Triangle and many stars near the zenith where the transparency was much better than in many other parts of the sky.

F. Aug. 26 15:25-15:30 UT t
Sun 3g 19s RSN 49

C-8, 32
T.O.F.

F. Aug. 26 15:40-15:45 UT nd
Sun - did not see any large, obvious prominences.

P.S.T., 20, 19, 15.5, 12.

F.-S. Aug. 26-27 00:20-00:50 UT ^{dock} John Vandesande's ^{full} ne; camera
ne: During twilight I went to John Vandesande's dock to observe and photograph the planets Jupiter and Venus in the W. The sky was very clear and transparent. In the darkening twilight they were a magnificent duo, only 7° apart. Venus went behind a tree at about 00:48 UT. (See diagram.)

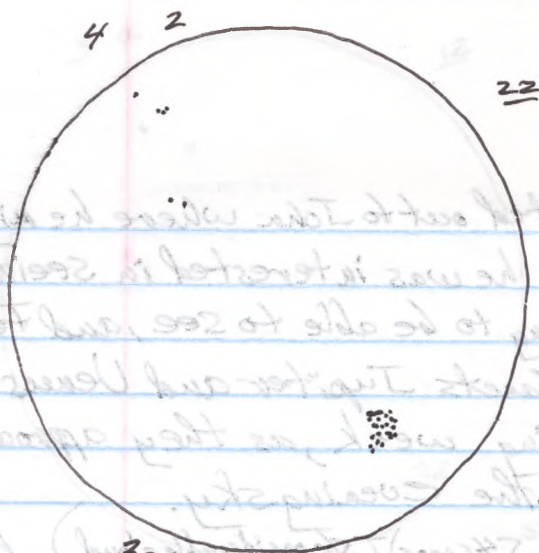
Jupiter
and
Venus!

ph: photographed area of Jupiter and Venus between about 00:38 and 00:50 UT using the 135 mm lens.

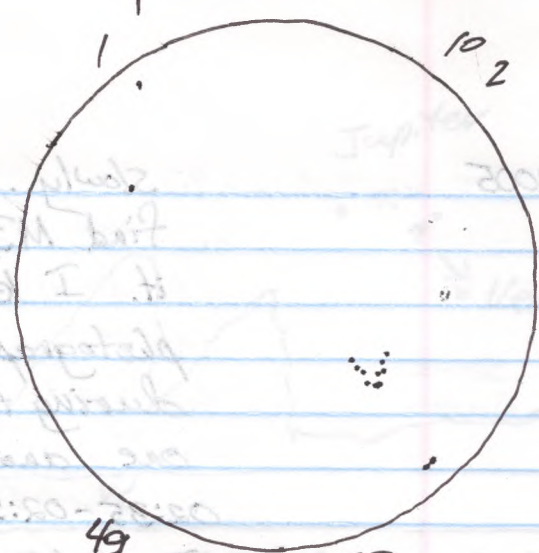
(at 03:19 UT)
02:55-04:20 UT y SRT 9-9.5 before moonrise ne; 18x50sb

ne: stars of summer; one nice meteor.

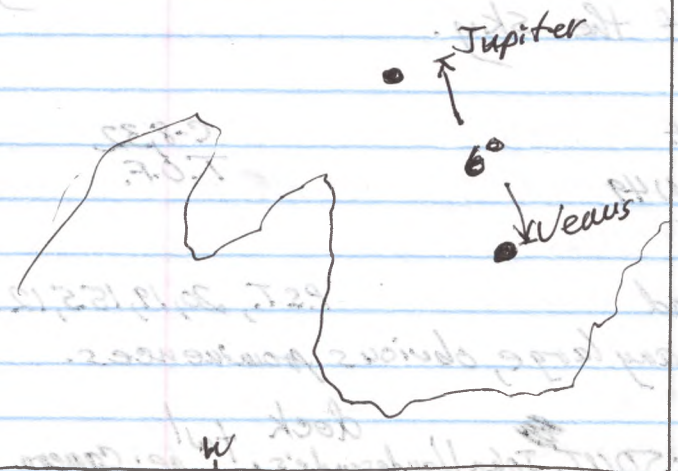
18x50sb: M1 and R Scuti, Uranus and area, Neptune



39
285
R6N58
Aug. 27
15:25-15:30 UT



49
145
R6N54
Aug. 28
16:35-16:40 UT



2005, Aug. 28-29, 00:30 UT View to W. from
John Vanderschueren's dock

Jupiter
and
Venus!

Jupiter and Venus in the W. The sky was very clear and transparent. In the background twilight they were a magnificent duo, only 7° apart. Venus was behind a face of about 00:30 UT. (See diagram.)
 4p: photographed Venus at Jupiter and Venus between about 00:38 and 00:50 UT using the 135mm lens.
 00:52-04:30 UT (28.19-28.20 UT) (see diagram) (see diagram) (see diagram)
 no: stars of summer; one nice meteor.
 (R6N54) (R6N54) (R6N54) (R6N54) (R6N54) (R6N54) (R6N54) (R6N54) (R6N54) (R6N54)

2005

and area, M16, M17, M18, M24, M25, M22, M2, M15,
Barnard's Star and area, IC 4665, M13, M92, T Cor Bor
and area, Keibler's Cascade, Kemple 2, Double Cluster
and Stock 2 M31 and area, M33, NGC 7789,
M71, M27, β Cyg.

Sa. Aug. 27 15:25 - 15:30 UT ϵ

Sun 3g 285 RSN 58

C-8, 32
T.O.F

Sa. Aug. 27 15:40 - 15:45 UT nd

Sun - did not see any major prominences

PST, 20, 19, 12, 8

Su. Aug. 28 16:35 - 16:40 UT

Sun 4g 145 RSN 54

C-8, 32
T.O.F.

Su. Aug. 28 16:50 - 16:55 UT nd

Sun - did not see any major prominences.

PST, 20, 19, 12, 8.

S.-M. Aug. 28-29 00:25 - 00:50 UT John Bundesander's dock twl ne; camera

ne: During twilight, I again went to John Bundesander's dock to observe and photograph Jupiter and Venus which were now about 6° apart.

Jupiter
and
Venus!

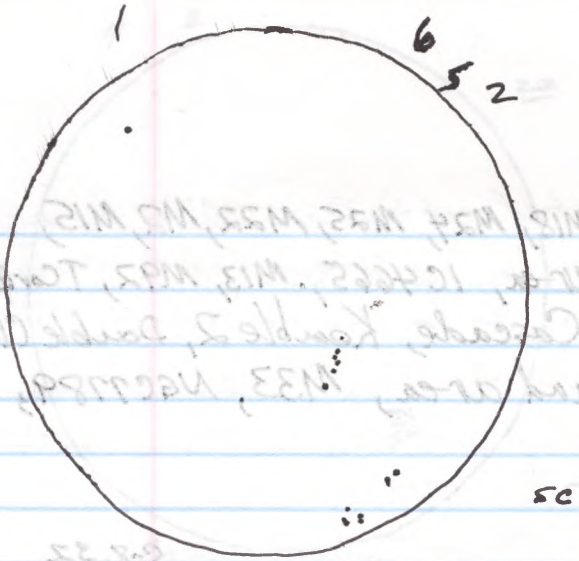
The sky was generally quite clear. Venus went behind a tree at about 00:46 UT (see diagram)

ph.: photographed the area of Jupiter and Venus from about 00:29 to about 00:46 UT.

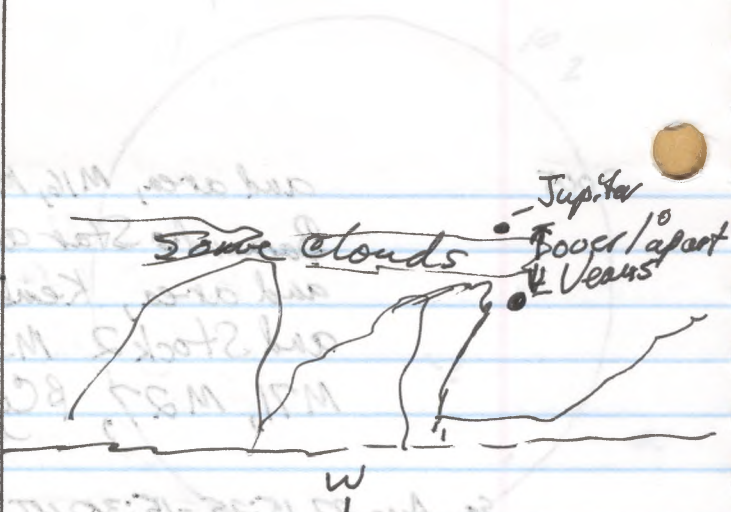
02:35 - 03:35 UT y and nd 57(?) 58-9 ne; 18X5015b

ne: stars of summer; bright Mars gleaming through the trees in the E. near the end of the session

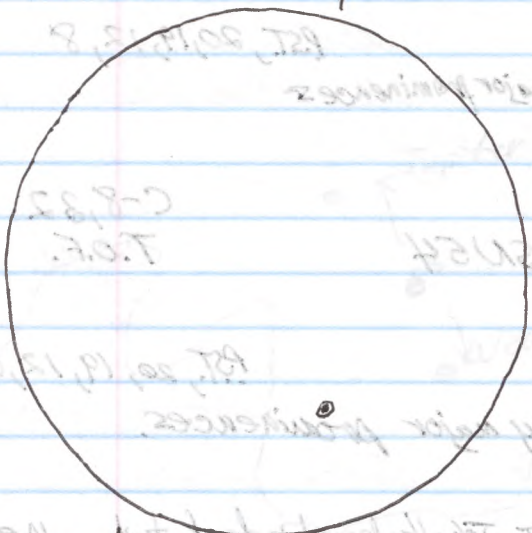
18X5015b: area of Uranus in Aquarius, area of Neptune in Capricornus, M1 and R Sca 1, M23, M24, M25, M8, M16, M17, M18, M31, M32,



4g Aug. 29
145
RSN 54 16:40-16:45 UT



2005, Aug. 31-Sept. 1 00:20 UT View to W
with Jupiter and Venus over 1° apart



19 Sept. 1
15
RSN 11 15:40-15:45 UT

Jupiter
and
Venus!

The sky was generally quite clear. Venus went behind a tree at about 00:10 UT (see drawing). Mr. [unclear] of the crew of Jupiter and Venus from about 00:30 to about 00:45 UT. 08:37-08:38 UT and at 21:07-21:08 UT. Mr. [unclear] of summer; bright blue clearing through the trees in the E. near the end of the season. [unclear] of Venus in Aquarius, or at Neptune in Capricorn, [unclear] [unclear].

2005,

M 110, M33, Keable's Cascade, Double Cluster and Stock 2, M29, Keable 2, M29, R Cor Bor, T Cor Bor, Barnard's Star, M13, M92

M. Aug. 29 16:40-16:45 UT ϵ

Sun 4g 14 s

RSN 54

C-8, 32, 15.5

T.O.F.

M. Aug. 29 16:55-17:05 UT α

-sun - no obvious prominences seen (x-made Ertlay epiece)

P.S.T., 20, 32, 28, 20, 15.5

W.-Th. Aug. 31-Sept. 1 00:05-00:45 UT John Vandesandes dock twl ne; camera

ne: During twilight I observed Jupiter and Venus slightly over 1° apart in the W. sky. There was some cloud in the immediate area. (See diagram.)

ph: photographed area of Jupiter and Venus with the 135mm lens.

02:00-05:30 UT α & 00 SRT 7-9 (varied) neg 18x50isb

ne: stars of late summer; several bright meteors; Mars in the latter part of the session; Aurora during about the first 20 minutes of the session - seen first as several vertical bands in the N to NNW, but it lasted only a short while, at least, as far as the activity was concerned.

some Aurora

18x50isb: M11 and R Scuti, M27, M57, M13, M92, Barnard's Star, Double Cluster and Stock 2, Keable 2, M2, M15, R Cor Bor, T Cor Bor, Uranus area, Neptune area.

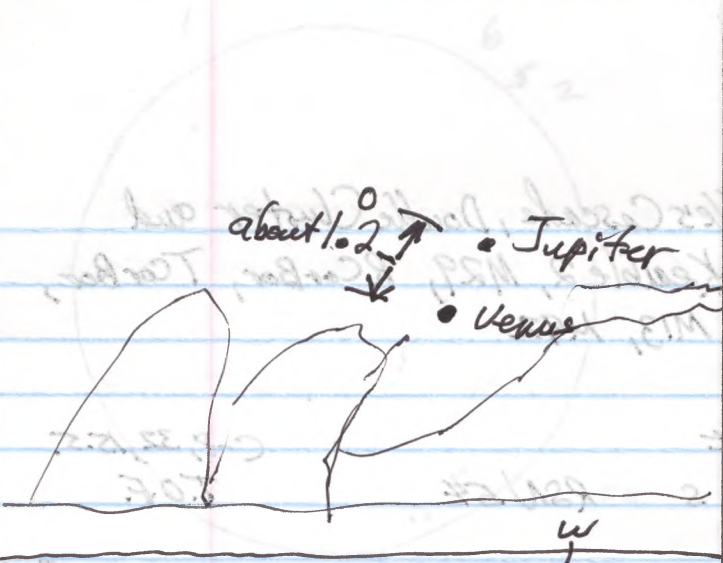
ph: photographed various areas of the sky, using the 200mm f/2.8 lens.

Th. Sept. 1 15:40-15:45 UT ϵ

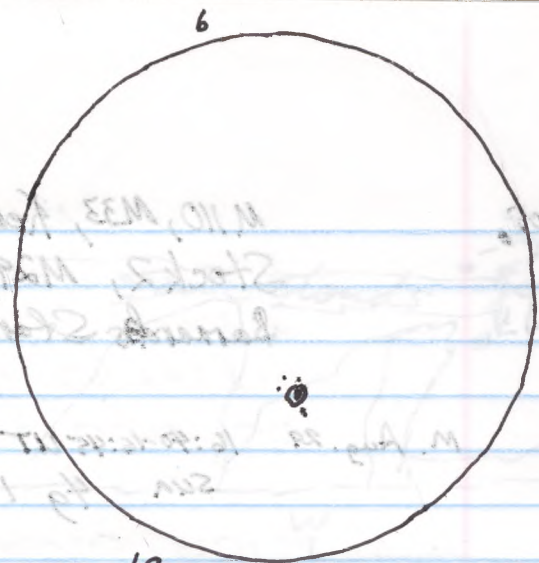
Sun 1g 1s RSN 11

C-8, 32, 20, 19, 17, 16.5

T.O.F.



2005, Sept. 1-2 00:20 UT Jupiter and Venus slightly over 1° apart



19
65
RSN16 Sept. 2
15:45-15:50 UT

W. Tr. Aug 31 - Sept 1 00:00-00:30 UT
 no. During twilight I observed Jupiter and Venus
 slightly over 1° apart in the W. sky. There was
 some cloud in the immediate area. (See diagram.)
 ph. photographed area of Jupiter and Venus with the
 137mm lens.
 00:00-02:30 UT (100-200T) (100-200T) (100-200T)
 no. Start the summer general night watches; Max
 in the latter part of the session; Aurora beginning but
 the first 30 minutes of the session - see first 20
 several vertical bars in the 11 to 1200, but it
 faded early - shot while out of focus as far as the
 activity was concerned.

18:30-19:00: M11, R24, M27, M13, M17,
 Barnard's Star, Double Cluster and Stock 2,
 Kappa 2, M2, M12, R24, Tor Bar,
 Venus and Neptune area.
 ph. photographed various areas of the sky using
 the 500mm f/8 lens.
 TR Sept 1 13:40-15:45 UT
 sun 19/2 RSN11
 CR 32 20/17/12
 T.O.F.

some
 known

2005 Th. Sept. 1 15:55-16:00 UT nd

155
P.S.T. 20, 32, 20, 19, 17, 16

Sun - no obvious prominences (* - Meade Earth eyepiece)

Th.-F. Sept. 1-2 00:05-00:45 UT John Vanderschuerde's dock twl ne; camera
ne: Jupiter and Venus in the W. just slightly more than 1° apart. (See diagram.) The sky conditions were excellent.

ph.: photographed area of Jupiter and Venus, using 135mm lens. Last night and tonight were the nights of the closest approach of these two planets for the current conjunction.

02:00-06:15 UT 00.58(?) T9-9.5 (except when ^{cloudy}) ne; 18X501Sb

ne: stars of late summer, Mars in last half, or more, of the session. For part of the session the see transparency was exceptionally good, especially in the last hour or so, but for about $1\frac{1}{2}$ hours (from about 03:00 to about 04:40 UT there were widespread clouds and I stopped doing serious observing for most of that time. Then at about 04:40 UT the skies cleared again. I photographed a fair number of objects.

18X501Sb: M11 and R Scuti areas of the Milky Way, M31 area, M33 area, Uranus area in Aquarius.

ph.: photographed various objects using the 200mm and the 135mm lenses.

F. Sept. 2. 15:45-15:50 UT t

Sun 1g 65 RSN16

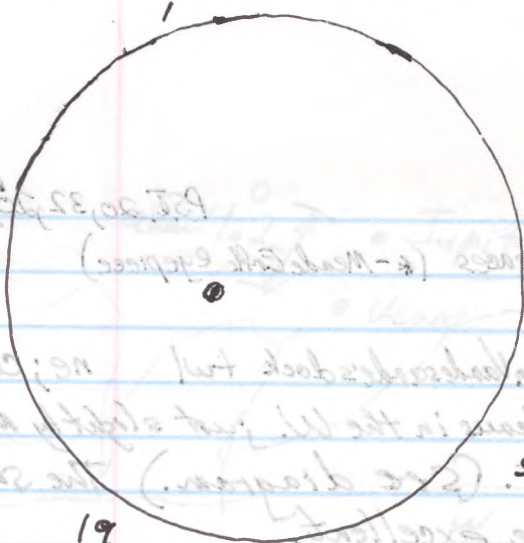
C-8, 32, 28, 20.

T.O.F.

F. Sept. 2 16:00-16:05 UT nd

Sun - no obvious prominences seen

P.S.T. 20, 15.5



19
15
RSN/11 Sept. 3.
15:45-15:50UT

From U 254: group of 7 galaxies:

- NGC 6959 mag. 13.7
- 6961 13.7
- 6962 12.1 (⊙) (*)
- 6963 14.0 (⊙) - in Aquarius
- 6964 13.0 (⊙) NE of the star
- 6965 14.0 71 Aquilae.
- 6967 13.1 (⊙)

Magnitudes as given in
The Deep Sky Field Guide
to Uranometria 2000.0

NGC 2000.0
⊙ A218

From U 258: group of 11 galaxies

- 7506 mag. 12.9 (12, 16, 7506 is included)
- 7517 14.4 (⊙) - in Pisces
- 7521 13.9 (⊙) E of 71 Aquarii
- 7524 14.7 (⊙) (Eastmost star of
the Water Jar).
- 7530 12.1 (⊙) (*)
- 7532 13.5 (⊙)
- 7533 14.7 (⊙)
- 7534 13.5 (⊙)
- 7544 15.3 (⊙)
- 7546 13.7 (⊙)
- 7554 15.5 (⊙)
- 7556 11.7 (⊙) (*)

⊙ p. 233, 234.

2005 F.S. Sept. 2-3 00:00-00:30 UT John Vandesande's clock twl ne; camera

ne.: Jupiter and Venus in the W. about 1.5° apart. There was some cloud in the ~~W.~~ W. part of the sky near the planets, but I was able to photograph them until Venus disappeared behind a very low layer of cloud. (See diagram.)

ph.: photographed the area of Jupiter and Venus with the 50 mm lens and the 135 mm lens. $12\frac{1}{2}$ "

01:30-07:00 UT y 58 PTT 7-9 (varied) ne; 20x100b; Ken's

ne: I had a long observing session with Ken Kingdon in the yard. He set up his $12\frac{1}{2}$ " Dobsonian "ball-telescope" and I set up the 20x100 binoculars. We saw the stars of summer and in the latter half of the session Mars was well up in the E. For most of the session there was an Aurora which was active for ^{the} first hour or more, especially in the N to NW and up about 50° or more. There were vertical bands and for a short while a long series of short vertical spikes up about 30° or so. Then most of the activity stopped and a glow in the N remained.

Aurora

20x100b: area of Neptune, M33, M36, M37, M38, Barnard's Star, T Cor Ber, R Cor Ber, M2; looked for a comet that Ken suggested might be visible in the NW sky, but was not sure of seeing it.

Ken's $12\frac{1}{2}$ " : A group of 7 galaxies NE of η Aquilae as shown on U254 was a target, but only 1 or 2 of them were clearly seen. Another target was the group of 11 galaxies E. of the Water Jar of Aquarius as shown on U258, but only 1 or 2 of them were clearly seen; also M33, M38,

2005

and Mars; M1; Pleiades, NGC 7789.

Sa. Sept. 3 15:45-15:50 UT t
sun lg 15 RSN11

C-8, 32, 20, 15.5
T.O.F.

Sa. Sept. 3 16:00-16:05 UT nd

P.S.T., 20, 20E*, 15.5

sun - no large, obvious prominences noticed. (* = made Earth eye prog)

Sa. - Su. Sept. 3-4 00:00-00:35 UT John Vandesandes dock twl ne; camera

ne: Clouds low in the W. prevented observing Jupiter and Venus. However, during the twilight I observed Arcturus and some of the bright stars of the Big Dipper.

Su. Sept. 4 15:10-15:15 UT t

sun lg 25 RSN12

C-8, 32, 28, 20
T.O.F.

Su. Sept. 4 15:20-15:25 UT nd

P.S.T., 20, 15.5

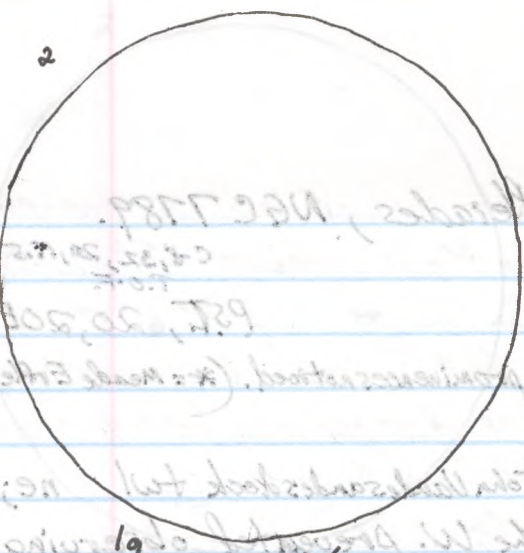
sun - no large, obvious prominences noticed.

S.-M. Sept. 4-5 6:30 p.m. - 6:30 a.m. E.D.T.
22:30 - 10:30 UT

Airstrip

"Nirvana" - Irvine Lake A twl; 5-8-9T-9.5 ne; 25" 18x50sbn 20x80ob.

ne: I decided to join some Kingston Centre people and some others at the Irvine Lake Airstrip (called "Nirvana") for observing at a very dark site. The weather was superb. I first met with Ken Kingdon and Steve Manders and Dave at the Moschora Restaurant on Highway 41 about 2 km. south of the turnoff to Nirvana at about 21:20 UT (5:20 p.m. E.D.T.). We ate there and then went to the site. I met some people from Montreal who had been there the previous night. Then some people from Ottawa arrived and I met them: a man named Frank who set up his C-8 near where I was, and John Douglas, and later Attilio Danko who brought his huge 25" telescope. I observed in twilight (and photographed) Venus and



and Marc; M. ...
Sept 3 16:00-17:00 UT
Sun - no large objects observed

Sept. 6
16:15-16:20 UT
RSN12

Stars of the Big Dipper
Sept 4 17:10-17:15 UT
Sun 19 RSN12

Sept 4 17:20-17:25 UT
Sun - no large objects observed

2-M. Sept 4-2 22:30-10:30 UT
I decided to join some people and some others at the Taine Lake district (called Mirvax) for observing at a very dark site. The weather was superb. I had met with the people and Dave

Members and Dave at the Mountain Point on Highway 41 about 2km south of the town of Mirvax at about 21:50 UT (2:00 PM EDT). We ate there and then went to the site. I met some people from Montreal who had been there the previous night. Then some people from Ottawa arrived and I met them; a man named Frank who set up his C-8 near where I was and John Douglas and later Attilio D'Amico who brought his large 52" telescope. I observed in twilight (and photographed) Venus and

and Marc; M. ...
Sept 3 16:00-17:00 UT
Sun - no large objects observed

Sept 3-4 00:00-00:30 UT
No: Clouds low in the W. prevented observing Jupiter and Venus during the twilight

Stars of the Big Dipper
Sept 4 17:10-17:15 UT
Sun 19 RSN12

Sept 4 17:20-17:25 UT
Sun - no large objects observed

2-M. Sept 4-2 22:30-10:30 UT
I decided to join some people and some others at the Taine Lake district (called Mirvax) for observing at a very dark site. The weather was superb. I had met with the people and Dave

Members and Dave at the Mountain Point on Highway 41 about 2km south of the town of Mirvax at about 21:50 UT (2:00 PM EDT). We ate there and then went to the site. I met some people from Montreal who had been there the previous night. Then some people from Ottawa arrived and I met them; a man named Frank who set up his C-8 near where I was and John Douglas and later Attilio D'Amico who brought his large 52" telescope. I observed in twilight (and photographed) Venus and

2005

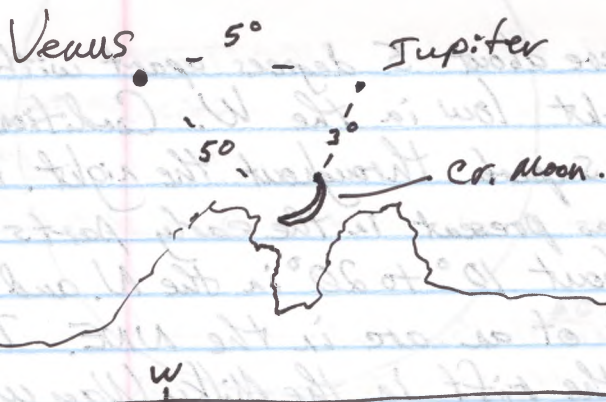
Aurora

Jupiter which were about 5 degrees apart with Jupiter on the right low in the W. Conditions continued to be superb throughout the night. An Auroral arc was present in the early parts of the night - up about 10° to 20° in the N. and later a strong segment of an arc in the NNE. The Milky Way and the rift in the Milky Way were extremely clear and quite defined. Besides Ken, Steve, and Dave, Norm Welbank, and Dave Maguire, and Ian Wisniewski and I were the members of the Kingston Centre who were present. After midnight, I was tired and slept in the car periodically until about 09:00 UT (5:00 a.m. E.D.T) which was just after the beginning of astronomical twilight. Shortly after that Attila left the site, with his vehicle pulling the trailer with his enormous telescope.

20x100b: I observed a few objects but dewing became a severe problem. Dave Maguire offered me his "power pack" into which I could plug my hair dryer. However, his small model could accommodate only up to 400-watt appliances. The hair dryer was a 1600-watt model. There was no gas-powered electrical generator available. I then gave up using the large binoculars, after trying several times to wipe away the dew.

18x5015b: I observed about 30 Messier objects: M11, M26, M27, M28, M8, M20, M21, M16, M17, M18, M23, M24, M25, M10, M12, M31, M32, M110, M33, Barnard's Star, T Cor Bor, R Cor Bor, Uranus area, Neptune area, MR.

25": In Attila Danko's large 25" telescope, I observed some members of a galaxy cluster in Aquarius (see U254) and one in Pisces (see U258). I also saw



2005, Sept. 6-7 00:15 UT Venus, Jupiter
and Cr. Moon low in the W.

I saw Venus and Jupiter and I was the member of the Kingston Center who were present. After midnight I was tired and slept in the car periodically until about 02:00 (2:00 a.m. EDT) which was just after the beginning of astronomical twilight. Shortly after that Attila left the site with his vehicle pulling the trailer with his camera telescope. I observed a few objects but during became a severe problem. Some require effort in his "power pack" identical I could plug my calculator. However, his small model could accommodate only up to 400-watt appliances. The fan stage was a 100-watt model. There was no payment electrical generator available. I then gave up using the large binoculars, after trying several times to wire another fan.

18x200sp: I observed about 30 Messier objects: M11, M26, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100, M101, M102, M103, M104, M105, M106, M107, M108, M109, M110, M111, M112, M113, M114, M115, M116, M117, M118, M119, M120, M121, M122, M123, M124, M125, M126, M127, M128, M129, M130, M131, M132, M133, M134, M135, M136, M137, M138, M139, M140, M141, M142, M143, M144, M145, M146, M147, M148, M149, M150, M151, M152, M153, M154, M155, M156, M157, M158, M159, M160, M161, M162, M163, M164, M165, M166, M167, M168, M169, M170, M171, M172, M173, M174, M175, M176, M177, M178, M179, M180, M181, M182, M183, M184, M185, M186, M187, M188, M189, M190, M191, M192, M193, M194, M195, M196, M197, M198, M199, M200.

MR.

92": To Attila's looking page 25" telescope, I observed some members of a galaxy cluster in Aquarius (30 U224) and one in Pegasus (20 W28). I also saw

Jupiter which was about 10 degrees above the horizon. Jupiter is the right low in the W. Continued to be present. Around 01:00 the right - up about 10 degrees in the W. The right way and the right in the W. Extremely clear only a few stars were visible. I observed a few objects but during became a severe problem. Some require effort in his "power pack" identical I could plug my calculator. However, his small model could accommodate only up to 400-watt appliances. The fan stage was a 100-watt model. There was no payment electrical generator available. I then gave up using the large binoculars, after trying several times to wire another fan.

18x200sp: I observed about 30 Messier objects: M11, M26, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100, M101, M102, M103, M104, M105, M106, M107, M108, M109, M110, M111, M112, M113, M114, M115, M116, M117, M118, M119, M120, M121, M122, M123, M124, M125, M126, M127, M128, M129, M130, M131, M132, M133, M134, M135, M136, M137, M138, M139, M140, M141, M142, M143, M144, M145, M146, M147, M148, M149, M150, M151, M152, M153, M154, M155, M156, M157, M158, M159, M160, M161, M162, M163, M164, M165, M166, M167, M168, M169, M170, M171, M172, M173, M174, M175, M176, M177, M178, M179, M180, M181, M182, M183, M184, M185, M186, M187, M188, M189, M190, M191, M192, M193, M194, M195, M196, M197, M198, M199, M200.

MR.

92": To Attila's looking page 25" telescope, I observed some members of a galaxy cluster in Aquarius (30 U224) and one in Pegasus (20 W28). I also saw

2005

M17 which was fabulously detailed. A simply superb view of the details in M17!
Overall, it was a wonderful night at Nirvana!

M.-T. Sept. 5-6 00:30-00:35 UT John Vanderandes dock twl ne
When I arrived at the dock, Venus and Jupiter were visible just above the trees in the W. and about 4 degrees apart, with Jupiter on the right. Within a couple of minutes or so, they were going behind the trees and were difficult to photograph.

ph: I took 4 photographs even though both planets were not easily seen while I was taking some of the photographs. In fact, the last one may not even show either planet.

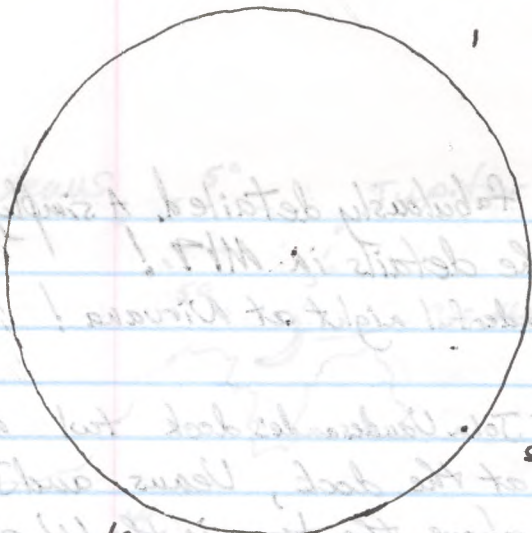
02:50-03:45 UT y 58(ET) 9-9.5! ne; 18x50 isb
ne: stars of summer under excellent skies, Mars very bright in the E.

18x50 isb: M11 and R Scuti, M33, Uranus area, Neptune area.

Tu. Sept. 6 16:15-16:20 UT t
Sun 1925 RSN 12 (See previous ^{page for diagram}) T.O.F. C-8, 37, 28, 20, 15.5

Tu. Sept. 6 16:30-16:35 UT ud P.S.T., 20, 20E, 15.5
Sun - no obvious prominences seen @E=Erte

T.-W. Sept. 6-7 23:55-00:25 UT John Vanderandes dock twl ne
I observed Venus and Jupiter and the thin crescent moon - all forming an interesting triangle low in the W. sky. (See diagram.)
ph: photographed area of Venus, Jupiter and Cr. Moon low in the W., using 135mm lens.



19
15
RSN11

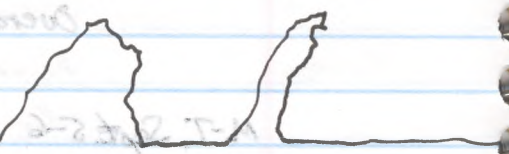
Sept. 7
16:45-15:50 UT

Cr. Moon



Venus

Jupiter



2005, Sept. 7^W 00:10 UT
View to W. showing
Cr. Moon, Venus, and Jupiter.

going behind the trees and were difficult to photograph.
Dr. I took photographs even though both planets were not easily seen while I was taking some of the photographs. In fact, the last one may not even show either planet.
08:50-03:45 UT y 280T-921
re: stars of summer under excellent skies. Mars very bright in the E. M33, Uranus area. Neptune area.

See 19 Sept. 2005 (see previous) T.O.F.
19 Sept. 16:30-15:30 UT R.S. (see diagram)
Sun - no obvious prominences seen (see Earth)
T.W. Sept. 6-7 03:22-00:30 UT
I observed Venus and Jupiter and the Airy contrast near - all forming an interesting triangle low in the W. sky. (see diagram)
Dr. photographed one of Venus, Jupiter and Cr. Moon low in the W. near 130 numbers.

19 Sept. 00:10 UT
View to W. showing
Cr. Moon, Venus, and Jupiter.

2005

02:50-05:00 UT 00 SR(?) 18.5-9.5 (varied) ne; 20x100b
ne: stars of late summer, Mars bright in the E., several
meteors.

20x100b: Uranus area, Neptune area, M11 and R Scuti,
Barnard's Star, I.C. 4665, T Cor Bor, M31,
M32, M110, M33, Pleiades, Kemble's Cascade,
Kemble 2, Double Cluster and Stock 2, D Dra-
DS₂ - split beautifully.

W. Sept. 7 15:45-15:50 UT t
Sun 1g 1s RSN11

C-8, 32
T.O.F.

W. Sept. 7 16:05-16:10 UT ud
Sun - no large, obvious prominences seen.

P.S.T., 20, 20E, 15.5

W-Th. Sept. 7-8 23:55-00:20 UT John Vanderkoo's dock twl ne

- I observed the Crescent Moon and Venus at
first, and then beginning at about 00:07 or so, Jupiter
became visible. The objects were about evenly spaced
low in the W. sky. (See diagram.)

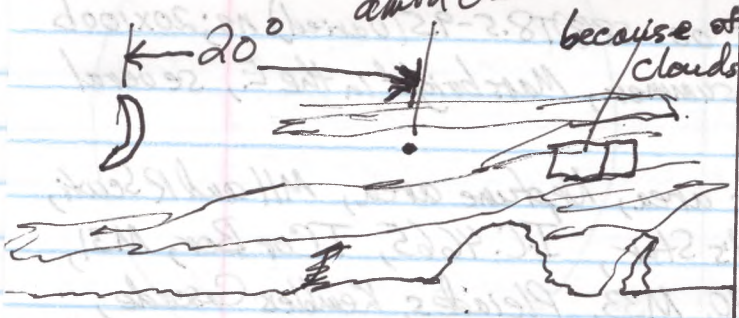
ph: photographed area of the W. sky showing the Cr. Moon,
Venus, and Jupiter, an area that barely fit into the
field of the 135mm lens.

02:15-03:00 y + ud 57(?) 6-7 (some haze) ne; 18x501sb
ne: stars of late summer, Mars among the trees in
the E., at least one nice meteor.

18x501sb: area of Uranus, area of Neptune,
M11 and R Scuti, M26, M13, M92, IC 4665, Barnard's
Star, Col 299, M71, M27, M57, U and EU Del,
M2, M15, M31, M32, M110, M33, Double Cluster and
Stock 2, NGC 7789

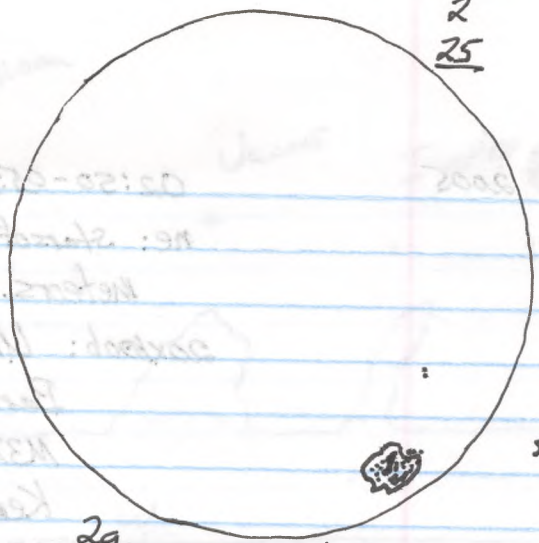
Cr. Moon.

Venus and clouds
Jupiter NOT SEEN because of clouds

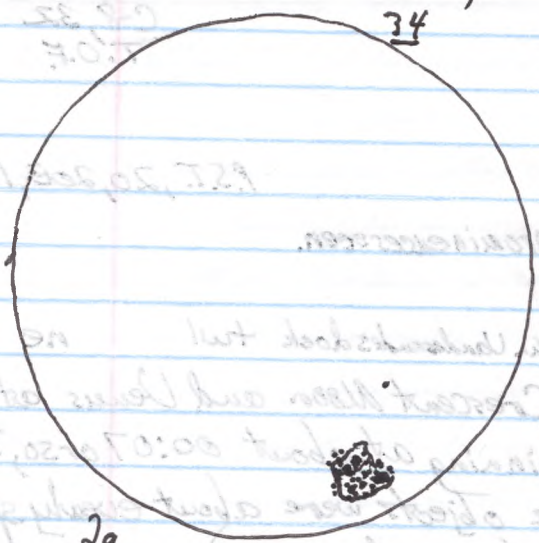


SW W

2005, Sept. 8-9 View to SW and W showing areas of Cr. Moon, Venus and Jupiter

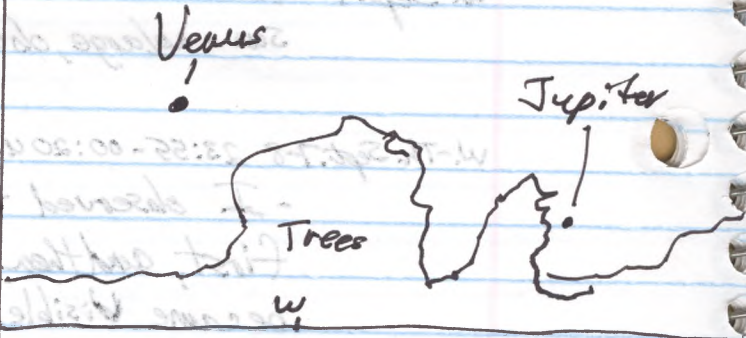


29
275
RSN 47
Sept. 9
16:25-16:30 UT



29
355
RSN 55
Sept. 10
14:40-14:45 UT

[See 2 pages further on for duplicate of this diagram.]



2005, Sept. 11-12 00:05 UT View to W. showing Venus and Jupiter

2005 Th.-F. Sept. 8-9 23:50-00:20 UT John Vandesande's dock twl ne

Cr. Moon and
Venus seen;
Jupiter NOT
SEEN.

I observed the Crescent Moon in the SW and Venus in the W. among clouds, but did not see Jupiter because of the clouds in that area of the sky. Most of the remainder of the sky was clear! (See diagram.)

ph.: I took 2 photographs - one of a beaver swimming near the dock and one showing Venus amid the clouds, but not Jupiter. The 85mm lens was not able to show both the area of ~~the~~ Venus and Jupiter and the area of the moon.

03:45-03:55 UT nd 4y S8(?)T7 (clouds esp. in S) (water vapour) ne

I observed the bright stars of summer and parts of the Milky Way in areas of the sky which were clear. A large part of the S. sky was cloud-covered. Also, there were clouds in the W. sky.

F. Sept. 9 16:25-16:30 UT t
sun 2g 27s RSN 47

C-8, 32
T.O.F.

F. Sept. 9 16:45-16:50 UT nd

P.S.T., 20, 20E, 15.5

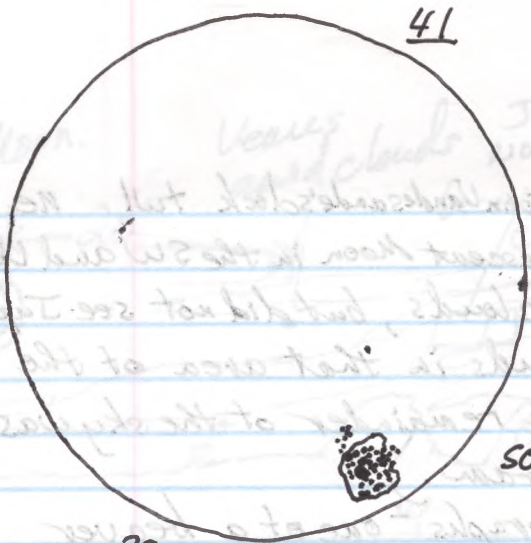
sun - no large, obvious prominences seen, but the large sunspot group that had just rotated onto the near side was very obvious and fairly detailed.

Sa. Sept. 10 14:40-14:45 UT
sun 2g 35s RSN 55

C-8, 32
T.O.F.

Sa.-Su. Sept. 9-10 01:00-03:00 UT roof of Ellis Hall ^{at Queen's University} S8(?)T4-5 (1/p, 1/gal) ne; ^{20x100b} ne: After attending in the afternoon the Queen's-Laurier football game (Queen's 40 - Laurier 7), I ate at Smitty's and went to Ellis Hall for the R.A.S.C.-K.C.

41



SC.

29
425
RSN62 Sept. 11
16:50-16:55 UT

Cr. Moon only
None seen;
Jupiter NOT
seen.

C. 8.35
T.O.F.

Sept. 9 16:22-16:30 UT
RSN 62

Sept. 9 16:02-16:30 UT
near side was very close and fairly detailed.
surface that had just rotated onto the
sw - so large craters prominent, seen, but the large

C. 8.35
T.O.F.

Sept. 10 14:40-14:45 UT
RSN 62

Sept. 9 10:00-10:30 UT
No. After working in the afternoon the Queen - lower
football game (Queen vs - Junior?) I ate at
Smith's and went to Ellis Hall for the R.A.S.C.

2005

KAON (Kingston Astronomy Outreach Network) September Public Observing Session. I waited until someone came with the key to open the door to the roof and missed seeing Venus and Jupiter which by about 00:45 or so were very low or had set. The First Quarter Moon was low in the SW. Several Kingston Centre members attended: Doug Angle, Kevin Kell, Kim Hay, Laura Gagné, Susan Gagnon, Dave Roder, and most of them had their own telescopes. I pointed out several constellations with the laser pointer.

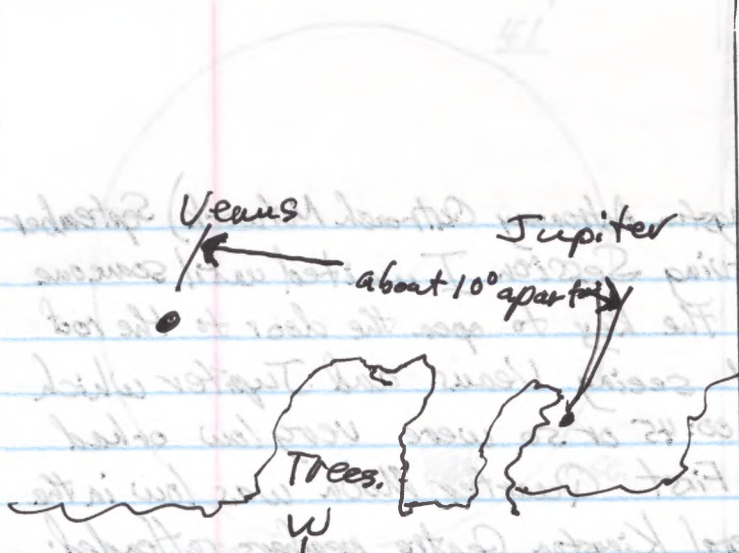
20x100b: I showed a good number of people: Alcor and Mizar, lunar craters, M31, Barnard's Star, IC4665, the α Persei Cluster.

Su. Sept. 11 16:50 - 16:55 UT t
Sun 29 425 RSN 62

C-8, 32
T.O.F.

Su. Sept. 11 17:25 - 17:30 UT nd P.S.T., 20, 20E, 15S
Sun - no obvious prominences. The very large sunspot group showed even at 20X to have at least a half dozen spots quite easily distinguished.

Sa. - Su. Sept. 9-10 04:20 - 04:30 UT nd SR? IT 6-7 (Aurora) 1e
Aurora.
After returning home from Kingston I observed the increasingly intense in the N, and from NW to NE. At first there was a bright double arc NW to NE. Later it became active and during the night from inside the bathroom and through the window I observed flaming pulsations. This active Aurora seemed to cover at least the N. half of the sky. The colour was not intense, but there was considerable activity.

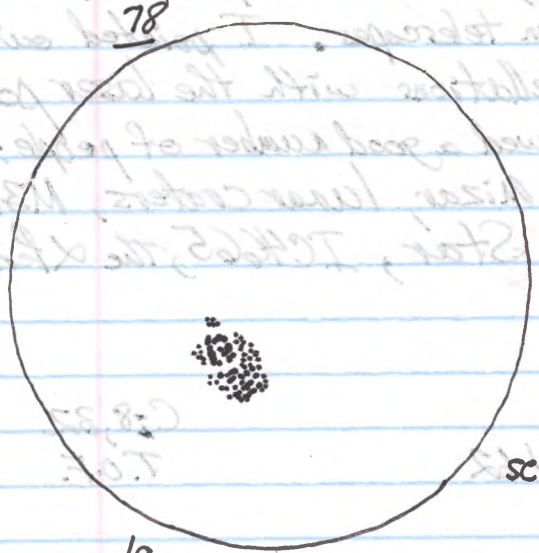


2005, Sept. 11-12, 00:05 UT View to W. Showing Venus and Jupiter.



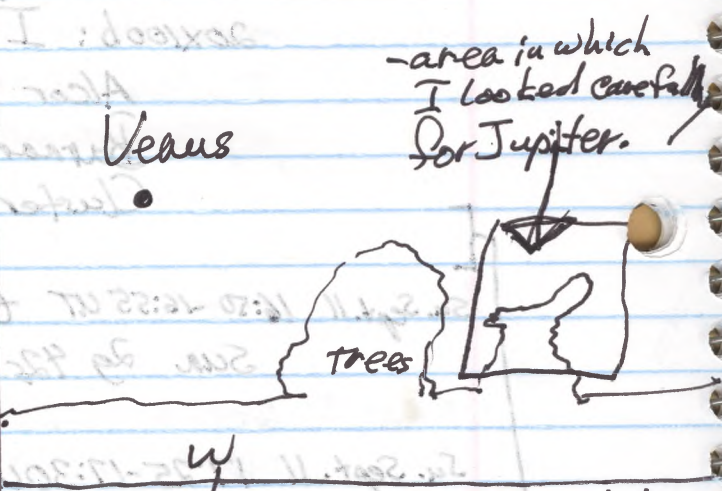
19
465
RSN 56

Sept. 12
17:15-17:20 UT



19
785
RSN 88

Sept. 13
15:55-16:00 UT



2005, Sept. 13-14 00:00 UT - View to W. Showing Venus, but Jupiter was not seen.

2005 Sept. 11-12 23:40-00:15 UT John Vandesande's dock twl ne.
- With the First Quarter Moon bright in the South,
I observed Venus and Jupiter about 10° apart
and low in the W. sky during early twilight.
Venus was seen well before Jupiter. Jupiter
when first seen was above the trees, but before
long it was behind some parts of a tree. (See
diagram.)

ph.: photographed area of Venus and Jupiter low
in the W. sky using the 85 mm lens.

02:35-04:00 UT y and S8(?) T88.5 (slight haze) ne
Stars of late summer; Mars rising in the E.

M. Sept. 12 17:15-17:20 UT t C-8,32
sun lg 465 RSN56 T.O.F.

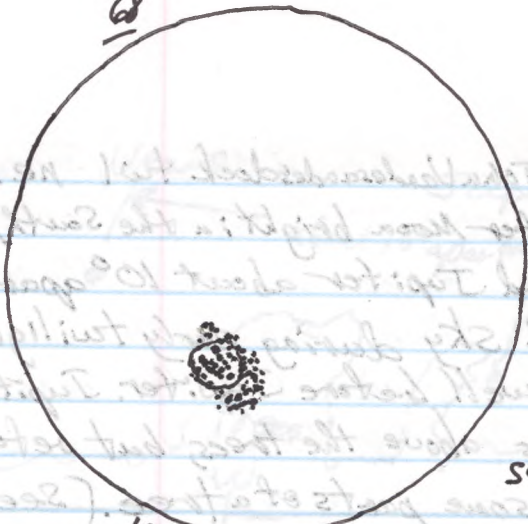
M. Sept. 12 17:55-18:00 UT ad PST, 20, 20E, 15.5
sun - no obvious prominences seen - very clear definition on
at least 6 spots in the large sunspot group.

Tu. Sept. 12 15:55-16:00 UT t C-8,32
sun lg 789 RSN88 T.O.F.

Tu. Sept. 13 16:10-16:15 UT ad PST, 20, 20E, 15.5
sun - no obvious prominences noticed - very clear
definition on many members of the very large sunspot
group on the sun currently.

T.-W. Sept. 13-14 23:40-00:10 UT John Vandesande's dock twl ne
- With the First Quarter moon in the S. sky I observed Venus
in the W., but did not knowingly see Jupiter though I
looked carefully for it. (See diagram)
ph: On later examining the photo I took, I easily saw Jupiter on it.

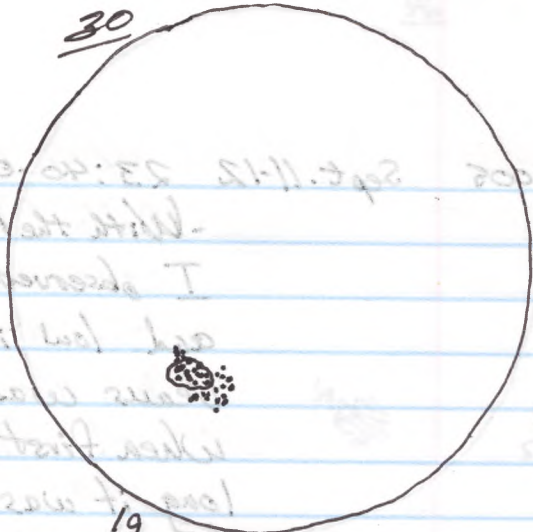
68



19 Sept. 14
685 RSN 78 15:45-15:50UT

sc

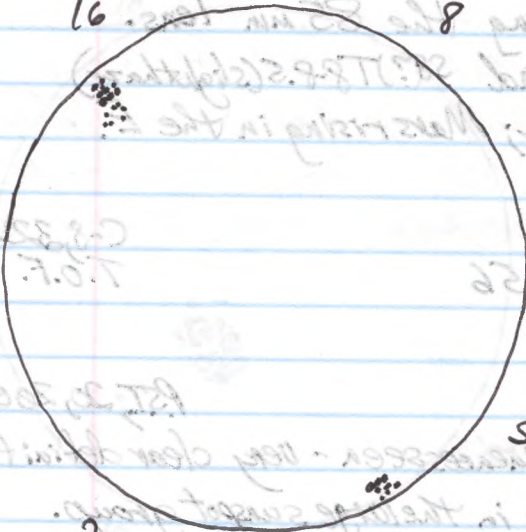
30



19 Sept. 15
305 RSN 40 17:50-17:55UT

sc

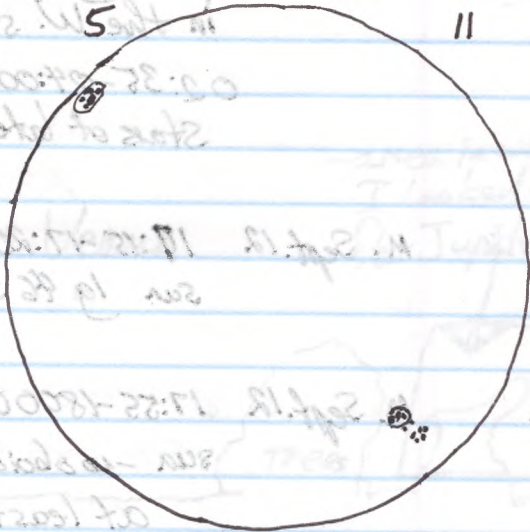
16



29 Sept. 18
215 RSN 44 14:30-14:35UT

sc

5



29 Sept. 19
165 RSN 36 15:35-15:40UT

sc

11

2005 W. Sept. 14 15:45-15:50 UT *hints of faint prominences* C-8, 32
Sun 19 685 RSN 78 T.O.F.

W. Sept. 14 16:05-16:10 UT nd P.S.T., 20, 20E, 15.5
Sun - no obvious prominences seen - several members of the
very large sunspot group very evident and defined

Th. Sept 15 17:50-17:55 UT t C-8, 32, 28, 20, 15.5
Sun 19 305 RSN 40 (seeing: not good) T.O.F.

Th. Sept. 15 18:05-18:10 UT nd P.S.T., 20, 20E, 15.5
Sun - no obvious prominences; several members of the very
large sunspot group very obvious and defined.

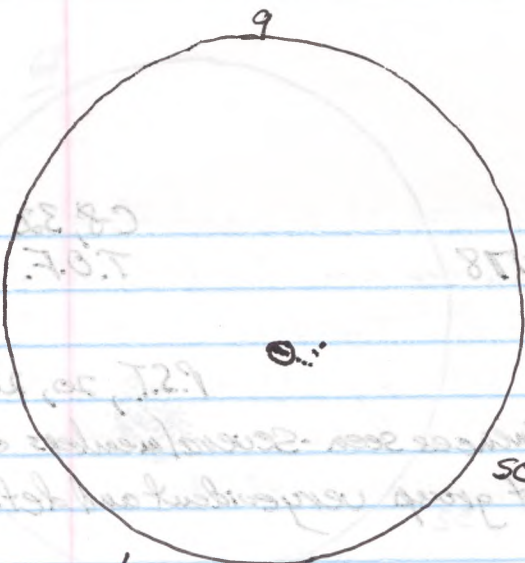
Su. Sept. 18 14:30-14:35 UT t C-8, 32, 28, 20, 15.5
Sun 29 245 RSN 44 T.O.F.

Su. Sept. 18 18:00-18:05 UT nd P.S.T., 20, 20E, 15.5
Sun - members of the 2 sunspot groups seen - possibly
some hints of prominences - with the 15.5mm eyepiece.

S.-M. Sept 18-19 03:25-03:35 UT nd S 70° T 3 (faint, ^{cloud} some n) ne
- With the moon about 25 hours past Full Moon,
I observed briefly, seeing the Summer Triangle
and a few other stars and Capella just above
the trees in the NE and Mars just above the
trees in the E., and the moon quite high in the SE.

M. Sept. 19 15:35-15:40 UT t C-8, 32
Sun 29 165 RSN 36 T.O.F.

M. Sept. 19 16:15-16:20 UT nd P.S.T., 20, 20E, 15.5
Sun - members of 1 sunspot group seen, or at least one member;



19
95
R5019
Sept. 21
17:15-17:20 UT

W. Sept. 14 12:45-13:00 UT
Sun 19 02 R5018

W. Sept. 14 12:02-12:10 UT

SC.

W. Sept. 15 17:50-17:55 UT

R5019 02 12.2

sun - no obvious prominence; several members of the very large sunspot group were visible and defined.

R5019 02 12.2
T.O.F.

W. Sept. 18 14:30-14:35 UT
Sun 02 02 R5019

R5019 02 12.2

sun - member of the 2 sunspot groups seen - possibly some link of prominence - with the 12.2 sun spot.

W. Sept. 18-19 10:15-10:20 UT
Sun 02 02 R5019
- With the moon about 0.5 hours past Full Moon, I observed briefly, seeing the Sun as a triangle and a few other stars and Capella just above the trees in the NE and Mars just above the trees in the E, and the moon quite high in the SE.

R5019 02
T.O.F.

W. Sept. 19 12:35-12:40 UT
Sun 02 02 R5019

R5019 02 12.2

sun - member of 1 sunspot group seen - or at least one member.

2005

possibly some hints of faint prominences.

T.-W. Sept 20-21 01:00-01:30 UT y 58JTS(gml) ne; 18X501sb

ne: With a bright gibbous moon rising in the E. behind the trees, I observed the stars of autumn.

18X501sb: area of Neptune, M15, M31, Kemble's Cascade, Kemble 2, M13, M92.

W. Sept. 21 17:15-17:20 UT t
sun lg 9s RSN19

C8, 32, 28, 20, 15.5
T.O.F.

W. Sept. 21 17:30-17:35 UT nd

P.S.T., 20, 20E, 15.5

sun - no obvious prominences, just slight hints of such; very obvious view of the sunspot group

W.-Th. Sept. 21-22 00:25-01:05 UT y 58(JT9) (at end of twl) ne; 18X501sb

ne: stars of autumn; one meteor of about mag. 3.

18X501sb: area of Uranus, area of Neptune,

M11, M26, M16, M17, M18, M8, M20, M21, M22,

M23, M24, M25, M27, M13, M92, M15, M31, M38,

M110, M10, M12, R Cor Bor, T Cor Bor, IC4665,

Barnard's Star, Kemble's Cascade, Kemble 2,

Draco DS, Double Cluster, Stock 2, some of

the α Persei Cluster among the trees, β Lyrae

near its minimum at about mag. 4.1; δ Cephei near

its maximum at about mag. 3.6.

The sky was beautifully transparent for about

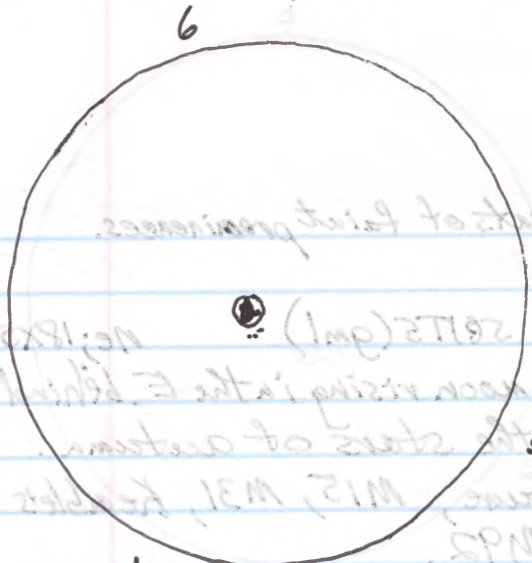
20 minutes before the end of astronomical

twilight which was at 00:44 UT. That was

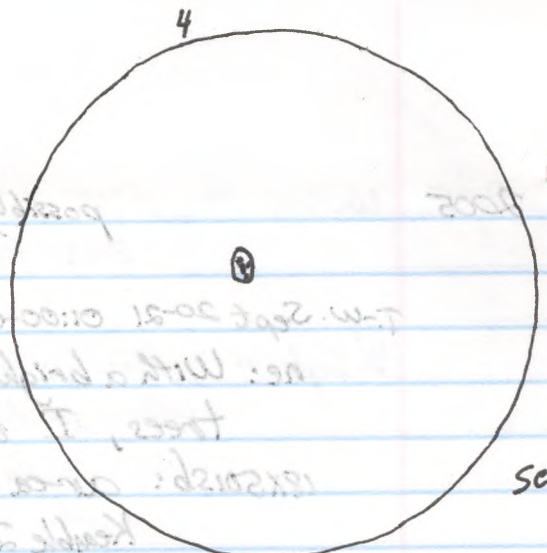
also the minute given for moonrise, and so

after that time the transparency in the

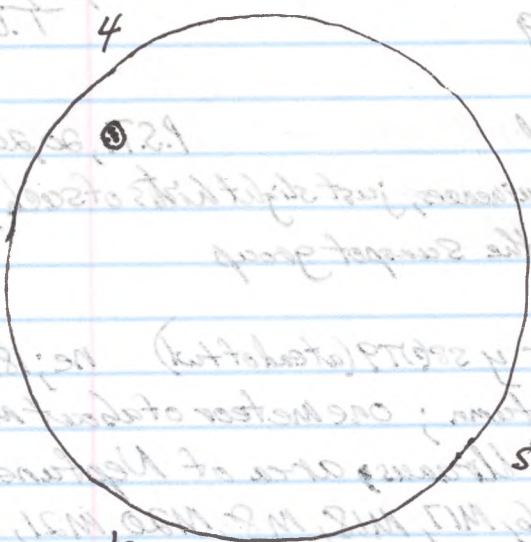
E. was compromised by moonlight.



19
65
RSN16 Sept. 23
16:40-16:45 UT



19
45
RSN14 Sept. 24
14:25-14:30 UT



19
45
RSN14 Sept. 27
17:10-17:15 UT

2005 F. Sept. 23 16:40-16:45 UT t
sun 1g 6s RSN 16

C-8, 32, 28, 20, 15.5
T.O.F.

F. Sept. 23 16:55-17:00 UT nd P.S.T., 20, 20E, 15.5
sun - no definite prominences but hints of faint prominences,
and clear view of the sunspot group.

F.-S. Sept. 23-24 00:50-02:05 UT y SR(?) T9. (very good transparency) ^{in most areas of the sky} 18x50sb
ne; n

ne: stars of autumn
18x50sb: Uranus and its area in Aquarius;
Neptune and its area in Capricornus, M22, M24,
M25, M16, M17, M18, Barnard's Star, IC4665,
M13, M92, Kemble 2, V Draconis - D.S., M15, M2,
NGC 7789, Double Cluster, Stock 2.

Sa. Sept. 24 14:25-14:30 UT t
sun 1g 4s RSN 14

C-8, 32
T.O.F.

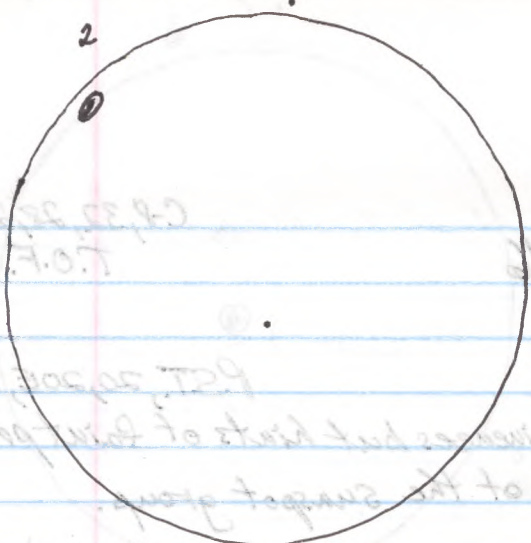
Sa.-Su. Sept. 24-25 01:45-02:30 UT y (SR(?) T3-6 varied; n) ^{cloud; haze} ne; 18x50sb
ne: stars of autumn; one bright meteor of about
2nd mag. in E.; Mars in E.
18x50sb: Uranus and area; Neptune and area,
M15.

Th. Sept. 27 17:10-17:15 UT t
sun 1g 4s RSN 14

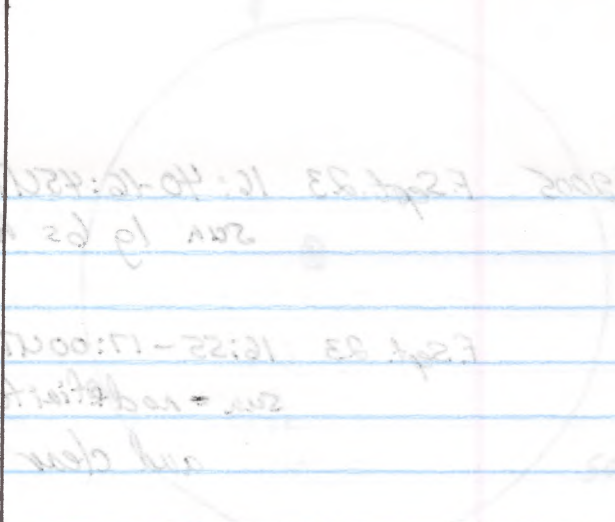
C-8, 32, 28, 20, 15.5
T.O.F.

Th. Sept. 27 18:05-18:10 UT nd P.S.T. 20, 20E, 15.5
sun - no obvious prominences, but some hints of faint
prominences; sunspot group easily seen.

Tu.-W. Sept. 27-28 00:55-06:30 UT 00 SR(?) T9-9.5 (!) ne; 20x100b, C-14, 19
ne: stars of autumn; Mars very bright in the E., a meteor



Sept 28
17:10 - 17:15 UT
RSN#3



C-8 33
T.O.F.

Sept 28 16:40-16:45 UT
Sun 19 42 RSN#4

PST 20 20 12.2

Sept 28 16:25 - 17:00 UT
Sun 19 42 RSN#4

29
35
RSN#3

Notes: Various orbits are in progress. M13, M2, M5, M7, M8, M9, M10, M11, M12, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100.

C-8 33
T.O.F.

Sept 28 14:32-14:35 UT
Sun 19 42 RSN#4

Notes: Stars of various magnitudes; one bright star of about magnitude 1.5 in E. M13, M2, M5, M7, M8, M9, M10, M11, M12, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100.

C-8 33
T.O.F.

Sept 27 17:10-17:15 UT
Sun 19 42 RSN#4

Notes: Stars of various magnitudes; some stars of faint magnitudes; sunset group easily seen. M13, M2, M5, M7, M8, M9, M10, M11, M12, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100.

Notes: Stars of various magnitudes; stars very bright in the E. M13, M2, M5, M7, M8, M9, M10, M11, M12, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100.

2005

of about mag. 3 in Pegasus; slight glow in the N. - which was probably aurora.

20x100b: Neptune, Uranus, M11, M26, Barnard's Star and area, T Cor Bor and area, M13, M92, M15; considerable time spent becoming familiar with the star patterns in the SW part of Area II which was the area I had selected for the Nova Search Program recently undertaken for the Kingston Centre. My Area II was 0-1h of R.A.; 0°-10° of Declination.

C-14, 19: M34.

ph: photographed area of Mars, My Nova Search Area II, and area of M42 rising.

W. Sept. 28 17:10-17:15 UT t
sun 2g 3s RSN23

C8, 32, 28, 20, 15.5
T.O.F.

W. Sept. 28 17:25-17:30 UT nd

PST 20, 20E, 15.5

sun - no obvious prominences but some slight hints of prominences; one sunspot group visible.

Th.-F. Sept. 29-30 02:55-04:40 UT y 58°18' N (T6 at end-cloud) ne; 18x501sb
ne: stars of autumn; Mars in the E.; one or two meteors.

18x501sb: Neptune and area in Capricornus; Uranus and area in Aquarius; briefly reviewed part of the Nova Search Program Area II; spent some time looking for the area of the star which was to be occulted by the asteroid 243 Ida (and possibly its satellite Dactyl!) later that night - at about 07:52 UT. The star was an 11.1 mag star in Aries at R.A. 2^h 04^m 05^s Dec. +14° 10'. The star was supposed to dip in

2005

magnitude to the magnitude of the asteroid, 14.1. The centreline of the path of visibility was to run from the area of Wolfe Island to Prince Edward County to the Toronto area. My location might have been near or beyond the edge of the path of visibility. I had learned about the event in an e-mail from Guy Nason. The dip in magnitude, even if seen from the centreline, was scheduled to be about 3 seconds, and if Dactyl~~o~~ passed over the star, the dip would be only about 0.1 second. Even from the "centre-line", observing the event would be a challenge. I saw some of the brighter stars in the area, but not the faint 11.1 magnitude star. I also observed the Pleiades and M31. At the end of the session the sky began to get more hazy and cloudy.

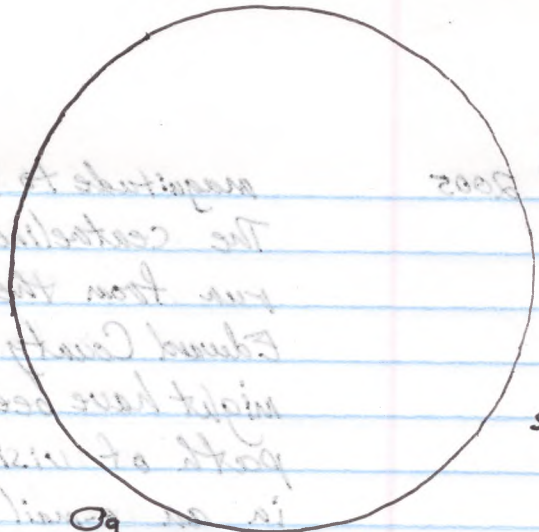
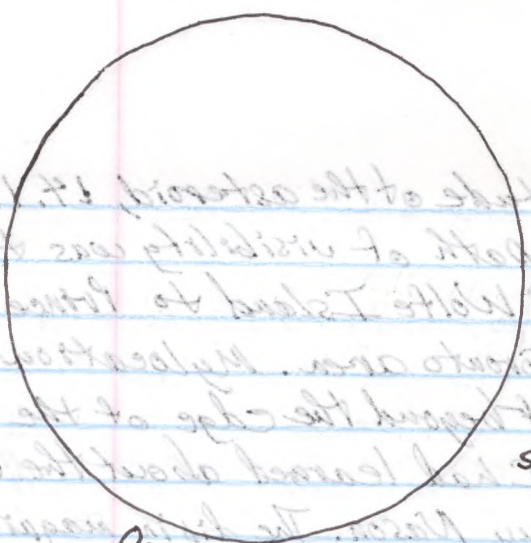
F. Sept. 30 17:55-18:00 UT \pm C-8,32
Sun 0g 0s RSNO T.O.F.

F. Sept. 30 18:15-18:20 UT nd P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but several hints of prominences.

F.-S. Sept. 30-Oct. 1 02:00-07:00 UT 00 ^{some cloud at beginning} 58(2179-9.5(!)) ne; 18X50/5b; 20X100b
ne: stars of autumn; Mars; several fairly bright meteors, M31
18X50/5b: Uranus and area, Neptune and area, M31, M32, M110, M33, Double Cluster, Stock 2, Kemble 2,
☉ Draconis-DS, M38, M2, M13, M92, Pleiades, Hyades
20X100b: -carefully examined part of Area II of the Nova Search Program - in the constellation Pisces, also M35, M36, M37,

2002

Sc.



09
05
RSNO Oct. 1.
17:55-18:00 UT

09
05
RSNO Oct. 2
17:25-17:30 UT

the dip would be
the "center-line"
challenge. I saw
over, but not
T also observed
the session the
cloudy.

the dip would be
the "center-line"
challenge. I saw
over, but not
T also observed
the session the
cloudy.

09
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RSNO 17:25-18:00 UT

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RSNO 17:25-18:00 UT

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RSNO 17:25-18:00 UT

of the Nova Search Program in the
30X1000 - carefully examined part of Area II
12X2000: Ultra-wide area, Neptune and area M31/M32,
M10, M3 Double Cluster, 2nd 2, Kinkles,
12X2000-02, M38, M13, M92, M57, M56, M55,
M31

of the Nova Search Program in the
30X1000 - carefully examined part of Area II
12X2000: Ultra-wide area, Neptune and area M31/M32,
M10, M3 Double Cluster, 2nd 2, Kinkles,
12X2000-02, M38, M13, M92, M57, M56, M55,
M31

2005

M38, M42, M43, Pleiades.

ph: photographed various areas of the sky using the 85mm lens guided on the C14.

Sa. Oct. 1 17:55-18:00 UT ϵ

Sun \odot \odot \odot RSNO

C-8, 32, 28, 20, 15.5
T.O.F.

Sa. Oct. 1 18:10-18:15 UT nd

P.S.T., 20, 20E, 15.5

Sun - no extremely definite prominences, but hints of several prominences in various places on the edge of the disk.

Sa.-Su. Oct. 1-2 02:15-06:15 UT 00 (poorer in first $\frac{1}{2}$ of session) 19, 7.4, 9
S80T7-9. λ ne; 18X5015b; C-14, λ

ne: stars of autumn; Mars in E., a couple of meteors.

18X5015b: Neptune and area, Uranus and area, M11 and R Scuti, M26, Barnard's Star, IC4665, T Cor Bor and area, Kemble's Cascade, Kemble 2, D Dra DS, NGC 7789, M31, M32, M10, M33, review of some of the star patterns in Area II of the Nova Search Program.

C-14: Mars - some features were possible to discern - at least one fairly long feature as well as the Polar Ice Cap.

ph: photographed various areas of the sky using the 85mm lens guided on the C-14.

Su. Oct. 2 17:25-17:30 UT ϵ

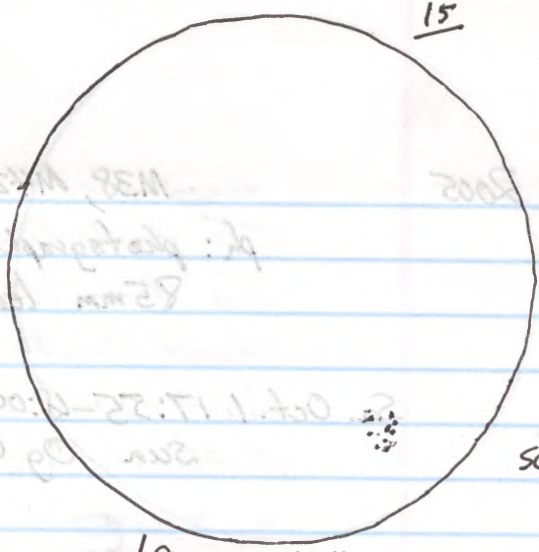
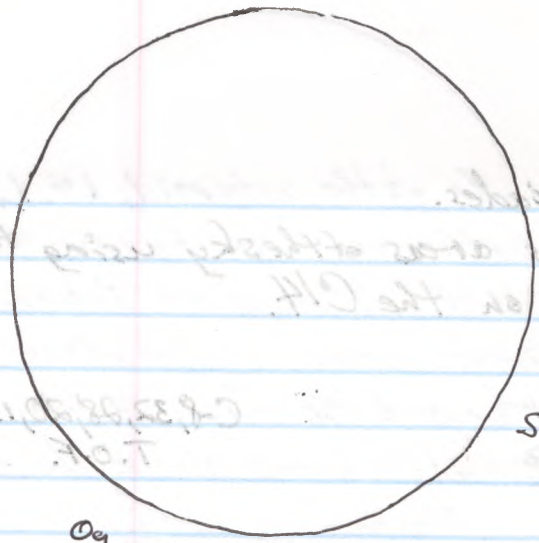
Sun \odot \odot \odot RSNO

C-8, 32
T.O.F.

Su. Oct. 2 17:35-17:40 UT nd

P.S.T. 20, 20E, 15.5

Sun - no obvious prominences, but hints of several prominences noticed.



sc.

sc

0g
03
RSNO Oct. 3
16:25-16:30UT

1g
153
RSN25 Oct. 4
17:10-17:15UT

The 82mm lens guided on the C-14.
 by photographed various areas of the sky using
 as well as the Polar Ice Cap.
 C-14: Mars - some features were possible to
 discern at least one fairly large feature
 from Scout Program.
 zone of the star pattern in Area II of the
 D2, VECTER, M31 WAS, M10, M33, region of
 and area, Kumbles Coracole, Kumbles 2, 3, 4, 5
 R 2001, M36, Barnard's Star, Taurus, Taurus
 182500p: Neptune and area, Uranus and area, Mars
 re: stars of out on; Mars in E, a couple of features
 20-20 Oct 1-2 CR: 17:00-17:15UT 00 28017-19-1

T.O.F.
C-14

Oct 3 17:25-17:30UT
sc 02 RSN10

Oct 3 17:25-17:30UT
 sc - no obvious prominences but hints of several prominences
 out on.

2005 Su.-M. Oct. 2-3 00:50-05:30 UT 00 (S8T8-9 varied) ne; 18x5015b; 20x100b

ne: stars of autumn; Mars in E.; several fairly bright meteors.

18x5015b: Uranus and area, Neptune and area, Barnard's Star and area, IC4665, T Cor Bor and area, R Cor Bor, M13, M92, Kemble's Cascade, Kemble 2, V Draconis - D.S., NGC 7789, Double Cluster in Perseus and Stock 2, M15, M31, M32, M33, M110.

20x100b: careful study of Area II of the Nova Search Program to become familiar with that area; Pleiades, Hyades.

ph.: photographed various areas of the sky using the 85 mm lens.

M. Oct. 3 16:25-16:30 UT t
sun 09 05 RSN0

C-8, 32
T.O.F.

M. Oct. 3 16:35-16:40 UT nd
sun - no obvious prominences but some hints of prominences

P.S.T., 20, 20E, 15.5

Tu. Oct. 4 17:10-17:15 UT t
sun 19 15 RSN25

C-8, 32, 28, 20, 15.5
T.O.F.

Tu. Oct. 4 17:20-17:25 UT nd
sun - no obvious prominences, but a few hints of prominences.

P.S.T., 20, 20E, 15.5

Tu.-W. Oct. 4-5 01:50-03:10 UT y nd (haze) S8T6-7 ne; 18x5015b
ne: stars of autumn; Mars in E. *

18x5015b: Uranus and area; Neptune and area; M15, M2, M13, M92, M31, M32, M33, M110, Kemble's Cascade, Kemble 2, V Draconis - D.S., M27, M57, Col 299, M71.

BOTH pLyr + * ne: β Lyr at min. at mag. 4.4; δ Cephei at δ Cep at min. ~~4.4~~ min. at mag. 4.4

2005 W. Oct. 5, 16:40-16:45 UT ϵ
Sun 1g 16s RSN 26

C-8, 32
T.O.F.

W. Oct. 5 16:55-17:00 UT nd

P.S.T., 20, 15RKE, 8RKE

Sun - no definite prominences, but hints of prominences.

W.-Th. Oct. 5-6 01:55-05:45 UT 00 SPT 8-9 NE; 18X501sb; 20X100b; C-8, 19
ne: stars of autumn; an extremely brilliant fireball
of mag. -9 to -10 moving NNE in Triangulum
and Cassiopeia for about 15° to 20° at 02:42:15 UT,
Fireball of mag. -9 to -10! appearing brilliantly white with some green as it
briefly seemed to explode; Mars very bright
in the E. *

18X501sb: Uranus and area, Neptune and area, M11
and R Scuti which appeared fainter than
"usual", M13, M92, M27, M57, Kemble's Cascade,
Kemble 2, V Draconis-DS, NGC 7789, M31, M32, M110,
M33, M15, M2, Double Cluster in Perseus and
Stock 2; carefully examined some areas of
Nova Search Area II; M71

20X100b: carefully examined some areas of Nova
Search Area II

C-14, 19: M31, Mars - polar cap discernible - also
viewed Mars with the 7.4mm ocular.

* ne: β Lyrae was again observed at, or near, minimum - at
about mag. 4.7; δ Lyrae was observed to be
 β Lyrae at mag. 4.3, slightly brighter than the previous night - at about
 δ Cephei at mag. 4.1 mag. 4.1, slightly brighter than ϵ Cep at mag. 4.2.

Th. Oct. 6 18:15-18:20 UT ϵ
Sun 1g 9s RSN 19

C-8, 32
T.O.F.

2005 Th. Oct. 6 19:00-19:05 UT nd P.S.T., 20, 20E, 15.5
Sun - no obvious prominences but several hints of prominences.

F. Oct. 21 17:25-17:30 UT t C-8, 32
Sun Og Os RSWO T.O.F.

F. Oct. 21 17:40-17:45 UT nd P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but hints of prominences, on
the southern limb especially.

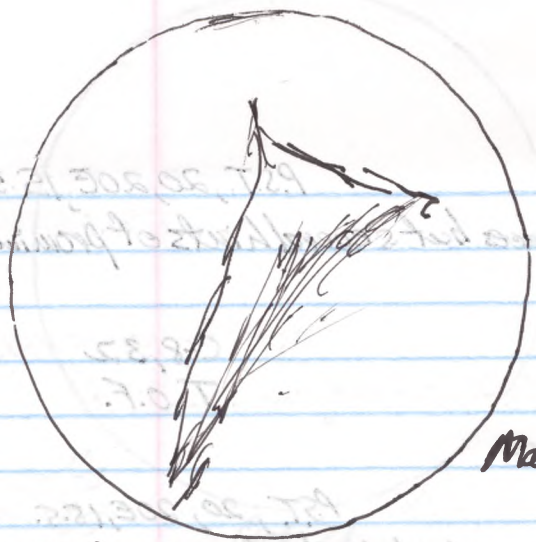
F-S Oct. 21-22 00:05-00:45 UT y and 5 TT 8.5-9 ne; 18X5015b
ne: stars of autumn; Mars in E; meteor of about mag. 2.5
in Pegasus.

18X5015b: area of Uranus, area of Neptune, M2,
M11 and RScuti, M15, Double Cluster and
Stock 2, Kemble's Cascade, parts of Area 11
of the Sky Search Program, M31, M33, Mars.

S-S. Oct. 29-30 00:10-03:45 UT 00 7-8 T 7-9 (a cirrus, slight big ne; 20X100b;
clouds for a while. Para white 18X5015b; C-14
ne: stars of autumn; 1 fairly bright meteor; Mars
in the E. at the time of its closest approach to Earth
in about 12+ years - the moment being listed
as 3^h UT in the Observers Handbook; also a
strange bright "star-like object" near the location
of Mira (o Ceti) which I thought might
have been Mira. After I noticed it at
about mag. 3 to 3.5, it seemed to stay
bright for perhaps 5 to 10 minutes and
then seemed to fade out. It may have been
1 or 2 degrees SE of the location of Mira. It
seemed to stay bright for too long to be a point
meteor.

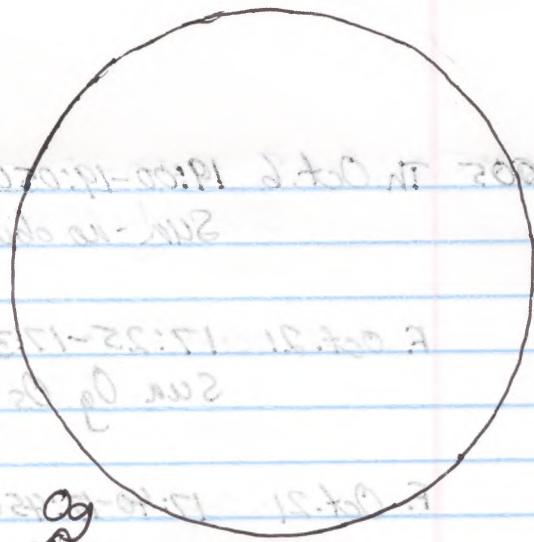
- "apparent star"
seen for about
10 to 11 minutes.

18X5015b: Area 11 of my Sky Search Program,



Mars

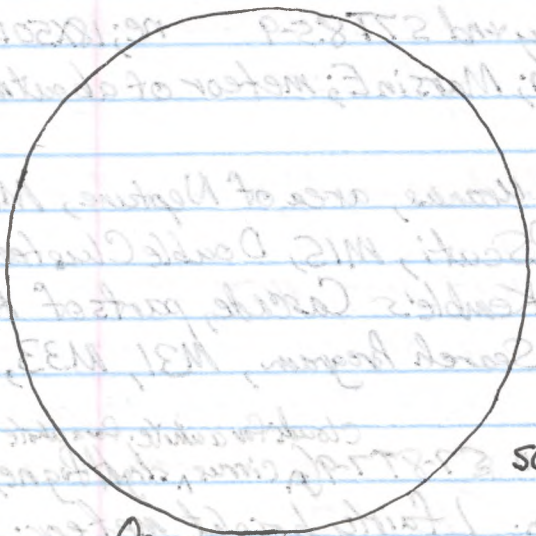
2005, Nov. 30, 3:20 UT - Appearance of Mars at 205.8X under a red filter at about the time of closest approach.



SC

Og
Os
RSNO

Oct. 30
17:40-17:45 UT



SC.

Og
Os
RSNO Nov. 2
17:15-17:20 UT

2005

reviewed since it had been a while since I had studied the area.

20x100b: Neptune and its area, Uranus and its area, the area N. of Neptune - observed since Guy Nason had informed me by e-mail that the asteroid 48 Doris would occult a star in that area on Nov. 3 at 1:46 UT. M11 and R. Scotti, R. Cor. Bor., T. Cor. Bor., IC4665, Barnard's Star, M13, M92, M2, M27.
C-14, 19: Mars (See drawing.); part of the Pleiades

Su. Oct. 30 17:40-17:45 UT t
Sun Og Os RSN O

C-8, 32, 28, 20, 15.5
T.O.F.

Su. Oct. 30 17:55-18:00 UT nd

PST.-20, 20E, 15.5

Sun - no obvious prominences but hints of prominences
along the southern limb.

S.-M. Oct. 30-31 03:15-04:45 UT y 8-9 T 9-9.5! ne; 18x50 15b
ne: stars of autumn; Mars very bright and high in the SE; several bright meteors.

18x50 15b: area of Uranus, various areas within Area II of the Sky Search Program, Kenble's Cascade, M35, M36, M37, M38, M42, M43, M45, Hyades, Mars, areas of Cetus, Orion and Gemini, ~~R. Lep. area~~ area near R. Lep. though the star itself may have been too faint to see in the binoculars.

W. Nov. 2 17:15-17:20 UT t
Sun Og Os RSN O

C-8, 32, 28, 20, 15.5
T.O.F.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2. Oct. 30-31 02:12-04:45 UT
 No stars of interest; Mars very bright and high in
 the SE; several bright meteors.

2. Oct. 30-31 02:12-04:45 UT
 No stars of interest; Mars very bright and high in
 the SE; several bright meteors.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2. Oct. 30-31 02:12-04:45 UT
 No stars of interest; Mars very bright and high in
 the SE; several bright meteors.

2. Oct. 30-31 02:12-04:45 UT
 No stars of interest; Mars very bright and high in
 the SE; several bright meteors.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2. Oct. 30 17:22-19:00 UT
 Sun - no observations but lists of prominences
 along the southern limb.

2005 W. Nov. 2 17:25-17:30 UT t

P.S.T., 20, 20E, 15.5

sun - no obvious prominences but hints of prominences.

W-Th. Nov. 2-3 00:20-02:00 UT y and ss S(?) T 8-9 ne; 20x100; C-8,³²
ne: stars of ~~water~~ ^{acutum}; Mars in the E.

20x100b: Neptune and the area near it, both in Capricornus and north of the area of Neptune. I planned to observe the predicted occultation of an 11.8 mag.

-hoped to view an occultation of a star in Aqr.

Star in Aquarius by the asteroid 48 Doris predicted to be at about 01:46 UT (8:46 p.m. E.S.T.). The predicted drop in mag. was to 12.7 for up to 16.1 seconds.

The star was at $\alpha: 21^h 06^m 15.78^s$ $\delta: -12^{\circ} 50' 53.9''$

I found the area quite easily. (See U299, 300)

It was about 5° N. of the area of Neptune, and about 1° S. of the area of NGC 7009, the Saturn Nebula, and about 1.5° E. of M73. I thought that perhaps I saw these two objects, though faintly in the binoculars. The star was difficult, and I was NOT sure of seeing it. I did have very good maps which I had pointed off from the computer. However, at mag. 11.8, the star was just too faint for the binoculars, unless, if possible, the area had been high in the sky and the transparency had been superb. As it was, transparency seemed to good but not superb. I observed the area of M73 and of NGC 7009, the Saturn Nebula, and thought I might have seen them faintly, but was not absolutely certain.

C-8, 32: I observed the area near Neptune, and

2605

thought that I saw that planet in the eyepiece, but may not have been absolutely certain. I tried to move N. from the area of the star θ Cap which was quite near Neptune to locate the area of the star mentioned above, but had difficulty locating the area precisely. After the time given for the occultation, the area of the sky became obscured because of clouds.

Th.-F. Nov. 3-4 23:07-23:11 nd twl ne

ISS

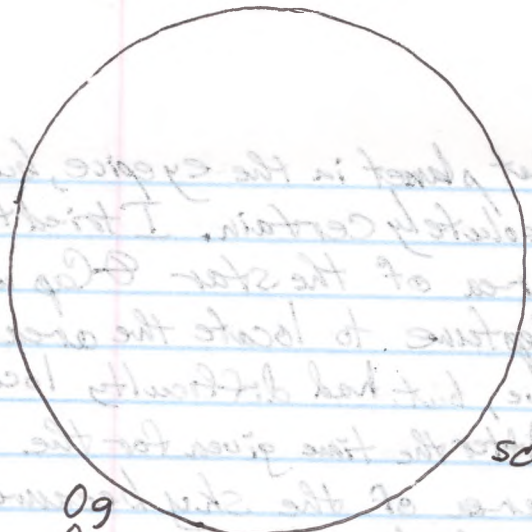
During twilight, which would end at about 23:33 UT, I observed the passage of the International Space Station (ISS). It appeared about 30° above the WSW horizon and passed through the Summer Triangle and near the zenith, and disappeared into the Earth's shadow near the Andromeda-Triangulum border. The ISS was very bright, being perhaps magnitude -4 , or about as bright as Venus, which I had seen about 45 minutes earlier about 10° to 15° above the SW horizon.

F.-S Nov. 4-5 03:50-04:30 UT y SS(?) J8 (water vapour) ne; 18X50 156

bright flash
(?)

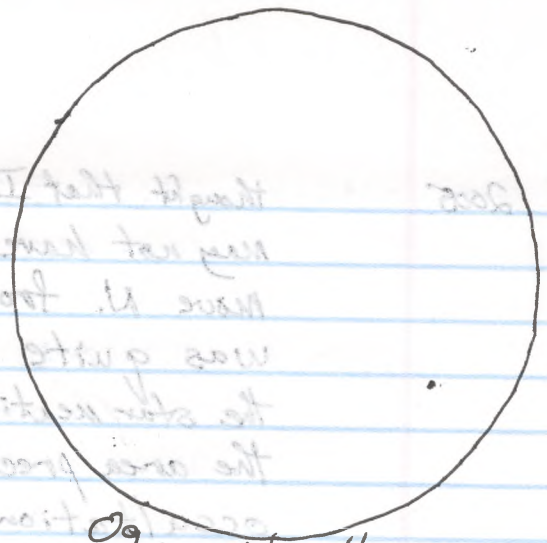
ne: stars of autumn, Mars very bright and high in the SE; a brilliant flash near the end of the session which may possibly have been from an unseen meteor behind me in the N. sky, but I was not sure of its cause.

18X50 156: M35, M36, M37, M38, M45, the Hyades, area of R Lep. areas in the constellations Orion and Cetus, the area of the Sky Search Program.



Og
Os
RSNO

Nov. 7
17:40-17:45 UT



Og
Os
RSNO

Nov. 11
17:55-18:00 UT

During twilight, which would end at about 23:33 UT I observed the passage of the International Space Station (ISS). It appeared about 30° above the WSW horizon and passed through the Summer Triangle and near the zenith, and disappeared into the Earth's shadow near the Autumnal Triangle. The ISS was very bright, being brighter than Venus, which I had seen about 45 minutes earlier about 10° to 12° above the SW horizon.

Nov. 7 - 02:50-04:00 UT (approximate): RSNO
no: Star of autumn, Mars very bright and high in the SE; brilliant flash near the end of the season which may possibly have been from an asteroid meteor taking me in the W sky, but I was not sure of its cause.
18:20:15: M32, M31, M37, M38, M42, the Hyades area of Leo. areas in the constellation Orion and Capri, the bowl of the Sky Survey program.

Nov. 7 - 23:07-23:11 UT
During twilight, which would end at about 23:33 UT I observed the passage of the International Space Station (ISS). It appeared about 30° above the WSW horizon and passed through the Summer Triangle and near the zenith, and disappeared into the Earth's shadow near the Autumnal Triangle. The ISS was very bright, being brighter than Venus, which I had seen about 45 minutes earlier about 10° to 12° above the SW horizon.

Nov. 11 - 17:55-18:00 UT
bright flash (?)

2005 M. Nov. 7 17:40-17:45 UT t
sun O_g O_s RSNO

C-8, 32, 28, 20, 15.5
T.O.F.

M. Nov. 7 17:50-17:55 UT y

P.S.T., 20, 20E, 15.5

sun - no obvious prominences, but some hints of prominences
on the southern limb.

Tu. Nov. 8 18:45-18:50 UT t

C-8, 32, 28, 20, 15.5
T.O.F.

sun O_g O_s RSNO

Tu. Nov. 8 18:55-19:00 UT y

P.S.T., 20, 20E, 15.5

sun - no obvious prominences, but hints of prominences
on the southern limb.

Tu.-W. Nov. 8-9 23:40-00:00 UT y SGT7 (Equl) ne; 18X501sb

ne: stars of autumn; Mars in E; First Quarter Moon
in the S.

18X501sb: - searched along the terminator of the moon to try
to see the "x-shaped" bright area surrounded by
a dark area right near the terminator, but
was not sure of seeing it. Ken Kingdon had
reported in an e-mail that he had seen it
earlier in the evening. - also M31, M33, ^{and} Mars.

04:30-05:10 UT y SK(?)T9

ne; 18X501sb

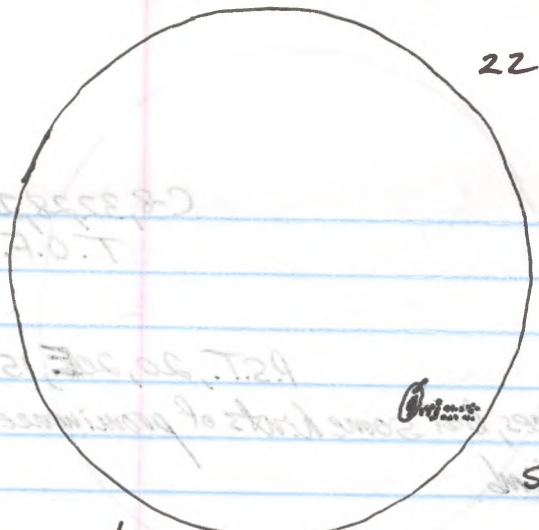
ne: stars of autumn and winter; Mars very bright
and very high in the S.; 3 meteors, two of which
were almost certainly Taurids.

18X501sb: M35, M36, M37, M38, M42, M43, M1, area
of R Lep, some parts of Area II of the Sky
Search Program.

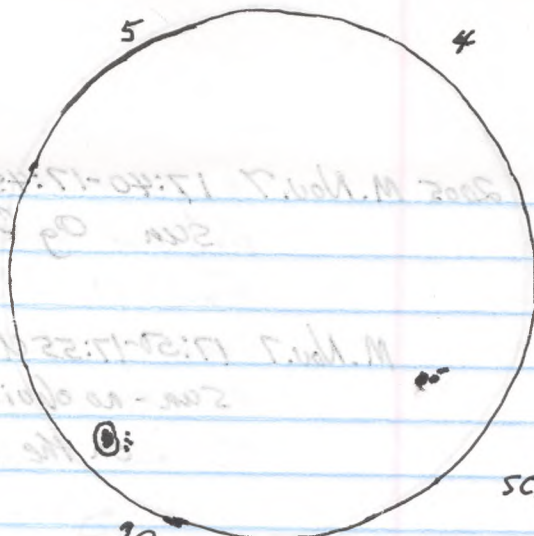
F. Nov. 11 17:55-18:00 UT t

C-8, 32, 28, 20, 15.5
T.O.F.

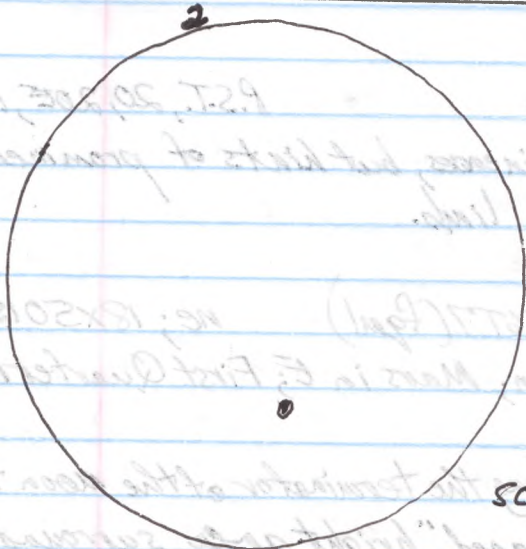
sun O_g O_s RSNO



19
225
RSN32 Nov. 14
18:05-18:10UT



29
95
RSN29 Nov. 23
18:15-18:20UT



19
25
RSN12 Nov. 25
18:00-18:05UT

2005 F. Nov. 11 18:05-18:10 UT y P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but some hints of prominences

M. Nov. 14 18:05-18:10 UT t C-8, 32, 28, 20, 15.5
sun lg 225 RSN 32 T.O.F.

M. Nov. 14 18:15-18:20 UT y P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but several hints of prominences

W. Nov. 15 18:15-18:20 UT t C-8, 32, 28, 20, 15.5
sun 29 95 RSN 29 T.O.F.

W. Nov. 23 18:30-18:35 UT y P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but some hints of prominences.

Th. F. Nov. 24-25 03:10-03:55 UT y STT 7 (some haze) ne; 18x50 isb
ne: stars of autumn and early winter; Mars very bright in Aries.

18x50 isb: M1, M35, M36, M37, M38, M42, M43, Kumbler's Cascade, area of R Lep, some parts of Area II of the Sky Search Program, Pleiades, Hyades, Mars, area of λ Orionis.

F. Nov. 25 18:00-18:05 UT t C-8, 32, 28, 20, 15.5
sun lg 25 RSN 12 T.O.F.

F. Nov. 25 18:20-18:25 UT y P.S.T., 20, 20E, 15.5
sun - no very obvious prominences, but some hints of prominences

M.-T. Dec. 12-13 03:10-03:15 FL: la STT 2 (some cloud; gml) ne
- a very bright gibbous moon, about $2\frac{1}{2}$ days before "near-zenith" Full Moon, very near the zenith, and Mars about Moon. 10 degrees from the moon in a SW direction

2005 T.-W. Dec. 13-14 01:10-02:45 UT FL: Ia S(?) T4 (gml; 1/p) ne

1 Geminid
and 1 "possible
Geminid"

- For over 1½ hr., I observed hoping to see some Geminid meteors which were near their peak, but the very bright "almost Full Moon" was a problem, as was the light pollution in the area. I saw one Geminid in the area of Orion, a fairly bright one, and also one "possible Geminid", a possibly fainter meteor with a longer 'trail' to the "right" of Orion. Stars seen were the brighter stars of Orion, Auriga, and Aries, and also Sirius, Procyon, Castor and Pollux, and Aldebaran.

6:08 - 6:10 a.m. E.S.T.
11:08 - 11:10 UT FL: Ia a1 twl ne

After the beginning of morning twilight I saw the stars of the Big Dipper in the N, and in the NE and E Arcturus and Spica and also Jupiter well up in the E. and Mercury well below Jupiter and also quite bright.

W.-Th. Dec. 14-15 04:35-04:50 UT FL: Ia S(?) T4 (gml; 1/p) ne

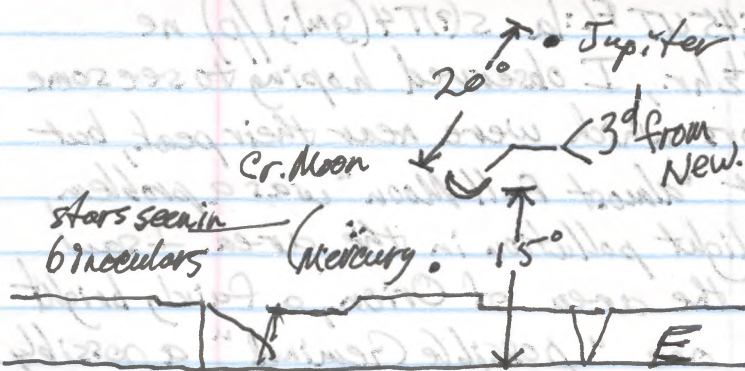
- For about 15 minutes I observed in the laneway with a brilliantly shining Full Moon (less than a day before the moment of Full Moon) glowing very near the zenith. In fact, I estimated that it may have been 1 to 3 degrees N. of the zenith. The moon was N. of the area of Aldebaran and the stars of Taurus and of Orion. Also seen were the bright stars of Orion, Sirius, Procyon, Castor and Pollux, Capella, the star Canopus between 10 and 15 degrees above the SE horizon. The planets Mars and Saturn were visible.

6:30 - 6:35 a.m. E.S.T.
10:30 - 10:35 UT FL: Ia a1 twl ne

After the beginning of morning twilight I saw Jupiter in the

Arcturus •

Spica •



2005, Dec. 28 10:50 UT View to E showing
Crescent Moon, Jupiter, Arcturus and Spica.

Arcturus
and Spica
Gemini

After the beginning of morning twilight I saw the
stars of the Big Dipper in the N and in the NE and
E Arcturus and Spica and also Jupiter well up
in the E and Mercury well below Jupiter and also
Jup. Ter.

W. M. Dec 14-15 04:32-04:30 UT (2014) (p. 1) as
- for about 12 minutes I observed in the morning
with a brilliantly shining Full Moon (last time taken
before the month of Full Moon) during very near
the south. In fact I estimated that it may
have been 1 to 3 degrees N. of the south. The
moon was N. of the area of Aldebaran and
the stars of Taurus and of Orion. Also
seen were the bright stars of Orion, Sirius,
Procyon, Castor and Pollux, Capella, Rigel,
Carpus between 10 and 15 degrees above the
SE horizon. The planets Mars and Saturn
were visible.

10:30-10:33 UT
0:30-0:33 UT
As
After the beginning of morning twilight I saw Jupiter in the

2005

E, about 30° above the horizon. Clouds prevented seeing Mercury. After a short while clouds also prevented seeing Jupiter also.

W.-Th. Dec. 21-22 04:30-04:35 UT FL:la S(?)T5(1/p) ne
- bright stars of Orion, and of Auriga and of Canis Major, Procyon, Aldebaran, Canopus, Castor and Pollux, Mars near the two brightest stars of Aries; Saturn in the E down from Castor and Pollux.

M.-T. Dec. 26-27 04:30-05:00 UT FL:la S(?)T6(1/p) ne; 18X5015b
ne: stars of winter; Mars, Saturn
18X5015b: areas of Orion, M42, M43, Pleiades, Hyades, area of R Lep (but the star appeared too faint to be seen), area of NGC 2244, Mars and area near the bright stars of Aries, Saturn, M35, M36, M37, and M38.

T.-W. Dec. 27-28 03:25-03:30 UT FL:la S(?)T5(1/p) ne
- Without turning off the bright outdoor lights on the front of the Condo, I observed for about 5 minutes seeing the bright stars of Orion, Procyon, Castor and Pollux, Capella, Aldebaran, and a few other stars. The Pleiades were quite close to the zenith. The planets seen were Saturn and Mars.

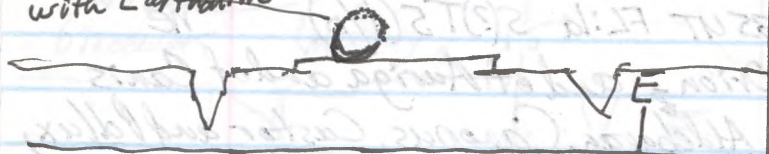
M. ^{5:50-6:00 am. E.S.T.} 10:50-11:00 FL:lanai beginning of tw. ne; 18X5015b
ne: At about the beginning of twilight I observed Jupiter very bright about 35° above the E. horizon with the crescent moon about 15° above the horizon. Arcturus and Spica were above them
~~18X5015b~~ Mercury was below. (See diagram)
18X5015b: Jupiter, Crescent moon and stars in the area.

Antares

Spica

Jupiter

Crescent Moon with Earthline



2006 Nov. 29 11:20 UT View to E as thin Crescent Moon is seen above roof

M-T Dec 26-27 04:30-05:00 UT F.L.N. 2012-11-29
 re: stars of winter; Mars, Saturn
 area of Orion, M42, M43, Pleiades, Hyads
 area of R136 (but the star appeared too
 faint to be seen), area of Usc 3rd
 Mars and area near the bright stars of
 Aries, Saturn, M32, M31, M37 and M38.

T-W Dec 27-28 05:30-06:00 UT F.L.N. 2012-11-29
 - brightening of the bright stars light
 on the part of the Corde, I observed for
 about 2 hours seeing the bright stars of
 Orion, Castor and Pollux, Capella, Alhaboran,
 and a few other stars. The Pleiades were quite
 close to the zenith. The planets seen were
 Saturn and Mars.

M. 10:20-11:00 F.L.N. 2012-11-29
 re: At about the beginning of twilight I observed
 Jupiter very bright about 35° above the E. horizon
 with the crescent moon about 15° above the
 horizon. Antares and Spica were also then
 visible. (see diagram)

2005 W-Th. Dec. 28-29 03:25-04:05 UT FL: la 59(?) T6 (1/p; ^{some} clouds) ne; 18X5015b
ne: stars of winter; Mars in Aries

18X5015b: area of R Lep; M42, M43, M41, M35, M36,
M37, M38, Mars, Pleiades, Hyades.

5:55 - 6:00 a.m. E.S.T.
M. 10:55 - 11:00 UT FL: lanai twl ne

- stars of the Big Dipper high in the N., Arcturus and Spica high in the E., Jupiter up about 35° above the E. horizon.

M. 11:15 - 11:20 UT FL: lanai twl ne

- I watched the thin Crescent Moon, about 40 hours before New Moon, as it emerged above the roof of a house across the pond. Earthshine on the moon was visible.

Th. F. Dec. 29-30 03:10 - 03:40 UT FL: la 58(?) T6 (1/p) ne; 18X5015b
ne: stars of winter; Mars in Aries, Saturn in the E.

18X5015b: area of R Lep, M35, M36, M37, M38, M41, M42, M43, Pleiades, Hyades, NGC 2244 and the nearby area.

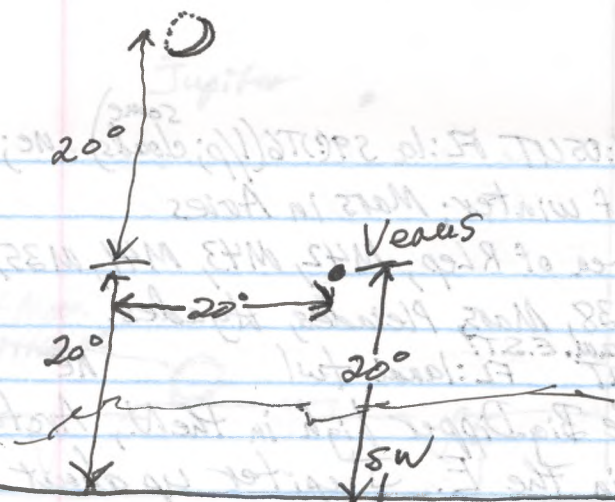
Clouds moved in from the south near the end of the session.

5:30 - 5:35 a.m. E.S.T.
M. 10:30 - 10:35 UT FL: lanai 59(?) T6 (1/p) ne

I observed the stars of the Big Dipper high in the N., and Polaris. Arcturus and Spica and Jupiter were seen in the E.

F.-S. Dec. 30-31 02:25 - 03:25 UT FL: la 59; T6 → 4 (1/p, haze) ne; 18X5015b
ne: stars of winter, Mars in Aries

18X5015b: M42 and area, other areas in Orion, M36, M37, Mars and areas of Aries, Pleiades, Hyades. Near the end of the session the transparency decreased, as the sky became more hazy.



2006, Jan. 2, 23:10 UT View to SSW and SW.

I watched the thin Crescent Moon about 40 hours before dawn, as it emerged above the roof edge. Venus was visible on the peak. Earthshine on the Moon was visible.

At 7:30 AM on 30 Dec 2005, I observed the start of the Big Dipper lightstick, and Polaris, Arcturus and Spica and Jupiter were seen in the E. Clouds moved in from the south near the end of the session.

At 7:30 AM on 31 Dec 2005, I observed the start of the Big Dipper lightstick, and Polaris, Arcturus and Spica and Jupiter were seen in the E.

At 7:30 AM on 31 Dec 2005, I observed the start of the Big Dipper lightstick, and Polaris, Arcturus and Spica and Jupiter were seen in the E. The sky was very clear and the stars were very bright.

2006 S-M Jan. 1-2 23:20-23:25 UT FL:la twl ne

Crescent Moon

-I observed the thin Crescent Moon, 44^h gm (at 23:20 UT) old, low in the SW sky about 15° above the horizon. Because of clouds I did not see Venus also low in the SW sky.

M.-T. Jan. 2-3 23:10-23:30 UT FL:la twl ne

-I observed the Crescent moon, under 3 days old in the SSW and Venus in the SW sky. (See diagram.) Earthshine was visible on the moon.

01:40-03:20 UT FL:la S9T6(1/p) ne; 18X5015b
ne: stars of winter, Mars in Aries, Saturn in Cancer.

18X5015b: M31, M35, M36, M37, M38, M41, M42, M43, M45, Hyades, Mars, areas of Aries, & Persei Cluster, Double Cluster in Perseus and Stock 2 nearby, area of Keble's Cascade though the stars of the Cascade were very faint mainly or not evident, areas of Orion, area of R Lep, NGC 2244 and the nearby area, Saturn, areas of Eridanus.

T.-W. Jan. 3-4 02:45-03:45 UT FL:la S9T6(1/p) ne; 18X5015b

ne: After observing the Crescent Moon, about 4 days old with apparent Earthshine earlier in the evening, I observed for about an hour, seeing Mars, Saturn, and the stars of winter.

18X5015b: Mars, Saturn, M42, M43, areas of Orion, M41, NGC 2244 and stars in the area, & Persei group, M31, M35, M36, M37, M38, M44, area of R Lep, Double Cluster and Stock 2.

I did not see any Quadrantid Meteors. That shower was supposed to have peaked earlier in the day - at 18h UT on Jan. 3rd.

2006

6:20-6:25 a.m. E.S.T.
M. 10:20-10:25 UT FL: laaai twl ne

Under somewhat foggy conditions I observed Jupiter well up in the E and Arcturus and Spica high in the E. and ^{some of} most of the stars of the Big Dipper high in the N.

W.-Th. Jan. 4-5 02:35-04:00 UT FL: la SQT6 (1/p) ne; 18x50lsb

ne: I observed with a 4-day-old Crescent Moon above the roof of the condo across the street for the first half-hour of the session. For about the last hour of the session, the moon was behind the building and not much of a problem for observing other objects. Besides the Crescent Moon, I observed the stars of winter with Canopus in the SE, and Mars and Saturn.

18x50lsb: M42, M43, areas of Orion, NGC 2244 in Mon. and the area of Plaskett's Star and S Mon and the 'Christmas Tree Cluster' M35, M36, M37, M38, Pleiades, Hyades, Mars and areas of Aries, & Perseus Cluster, Saturn and nearby M44.

6:05-6:10 a.m. E.S.T.
M. 11:05-11:10 UT FL: laaai twl ne

Early in morning twilight I saw the stars of the Big Dipper high in the N., and high in the E Arcturus and Spica. Below them were bright Jupiter and lower still Arcturus and a few of the brightest stars of Scorpius.

F.-S. Jan. 6-7 03:50-04:30 UT FL: la SQT5 (1/p; tqml) ne; 18x50lsb
ne: ^{First Quarter Moon} ~~Mars~~ up about 30° in the SW, and Mars about 20° above the moon, stars of winter, and Saturn well up in the East.

2006

6:30 - 6:55 AM EST.

M. 11:02 - 11:07 P.M. EST.

110

Under somewhat foggy conditions I observed Jupiter well up in the E and Arcturus and Spica high in the E and west of the stars of the Big Dipper high in the N.

M. 11:07 - 11:12 P.M. EST. (1/10) M. 11:07 - 11:12 P.M. EST.

No. I observed with a 4" old Crescent Moon about the roof of the house across the street for the first half hour of the session. For about the last half of the session the moon was behind the building and out of a problem for observing other objects. Besides the Crescent Moon, I observed the stars of winter with Caspary in the SE, and Mars and Saturn.

18:25:15: M. 11:12 - 11:17 P.M. EST. (1/10) M. 11:12 - 11:17 P.M. EST. is Mars and the area of Pleiades star and 2nd and 3rd stars of the 'Christmas Cluster' M37, M38, M39, Pleiades Hyades, Mars and area of Arcturus & Pleiades Cluster.

6:05 - 6:10 AM EST. M. 11:02 - 11:07 P.M. EST.

110

Each in morning twilight I saw the stars of the Big Dipper high in the N and high in the E. Arcturus and Spica. Below them were Jupiter and Mars still Arcturus and Spica. The brightest stars of Scorpions.

F-2 Jan 6-7 03:25-04:30 UT (1/10) (1/10) M. 11:02 - 11:07 P.M. EST. (1/10) M. 11:02 - 11:07 P.M. EST. about the moon, stars of winter and Saturn well up in the East.

2006

18x50**sb**: M42 and possibly limits of M43 though somewhat difficulty because of the ambient lighting, areas of Orion, area of R Lep, NGC 2244 and nearby AX Mon and Plaskett's Star, S Mon and the Christmas Tree cluster, M41, M47 and possibly M46 though it seemed quite faint, Pleiades, Hyades, M35, M36, M37, M38, Saturn and nearby M44.

6:15-6:20 a.m. E.S.T.
S.-M. Jan. 8-9 m. 11:15-11:20 UT FL:lanai twl ne

- With the glow of morning twilight visible above the roofs of the houses across the pond, I observed the bright stars of the Big Dipper high in the N., and in the E., Arcturus and Spica very high and well below them Jupiter and below it Antares and a number of the bright stars of Scorpius.

6:00-6:05 a.m. E.S.T.
W.-Th. Jan. 11-12 m. 11:00-11:05 UT FL:lanai twl ne

- Very early in morning twilight I observed the brightest of the stars of the Big Dipper very high in the N., and in the E. Arcturus very high and Jupiter up quite high and beside one or two of the stars of Libra, and below it Antares and one or two of the other bright stars of Scorpius.

5:05-5:10 a.m. E.S.T.
Th.-F. Jan. 12-13 m. 10:05-10:10 UT FL:lanai SPT3 (cloud) (Vp; same) ne

Some bright stars of the Big Dipper high in the N., Arcturus and Spica high in the E. and Jupiter well up in the E.

M.-T. Jan. 16-17 04:10-04:15 UT FL:la SPT4 (Vp; gw) ne

I observed for a very short while in spite of the

18:30:12: Mars and possibly parts of M13 through somewhat
 different because of the ambient lighting, areas
 of Mars and R10, M32, M33 and nearby
 AX Nov and Pictoris Star, SMC and the Centaurus
 Cluster M1, M7 and possibly M4 through;
 second magnitude, Pleiades, Hyades, M3, M5,
 M37, M42, Saturn and nearby M44.

2-M Jan 8-9 M 11:15-11:30 UT Ft. Llanos July
 8:00-8:30 AM EST
 - With the onset of morning twilight visible clouds
 the roots of the horses across the road, I
 observed the bright stars of the Big Dipper
 high in the sky. Only in the E. Arcturus and Jupiter
 very high and well below horizon together and
 below it Arcturus and number of the bright
 stars of Scapins.

W-TH Jan 11-12 M 11:00-11:30 UT Ft. Llanos July
 8:00-8:30 AM EST
 - Very early in morning twilight I observed the bright
 of the stars of the Big Dipper visible in the N.
 Only in the E. Arcturus very high and Jupiter
 up quite high and bright and below it Arcturus and
 stars of the Big Dipper and below it Arcturus and
 one or two of the other bright stars of
 Scapins.

Th-F Jan 13-14 M 10:05-11:00 UT Ft. Llanos 2573 (high/low) (cloud)
 8:00-8:30 AM EST
 - Same bright stars of the Big Dipper high in the N.
 Arcturus and Jupiter high in the E. and Jupiter high
 up in the E.

Fr-Sat Jan 16-17 04:10-04:15 UT Ft. Llanos 2575 (high/low)
 8:00-8:30 AM EST
 I observed for a very short while in spite of the

2006

light pollution and the very bright gibbous moon a little more than 2 1/2 days after Full Moon ~~very~~ high in the E. sky. Prominent objects were the bright stars of Orion, Aldebaran, Sirius and Canopus in the SE and Mars high in the W. Also seen were Castor and Pollux, Procyon, Saturn in Cancer, the Pleiades, Capella, and Regulus about 3° from the moon.

5:25-5:30 a.m. E.S.T. clouds
m. 10:25-10:30 UT FL:lanai SPT4 (1/p; gml; some) ne

Among clouds, I saw some of the bright stars of the Big Dipper high in the N. and Arcturus and Spica high in the E., with Jupiter in the E., and below it Antares.

T.-W. Jan. 17-18 04:30-05:00 UT FL:la SPT5 (1/p; gal) ne

- With a very bright gibbous moon in the constellation Leo high in the E., I observed the bright stars of Orion, Canis Major, Gemini and Auriga, and also Mars high in the W. and Saturn high in the E. in Cancer, Procyon, Regulus, the Pleiades, Aldebaran, and several stars of the constellation Lepus, and Canopus in the SE.

W.-Th. Jan. 18-19 02:55-03:40 UT FL:la SPT6 (1/p) ne; 18x50sb

ne: Earlier in the evening for about 5 min. I had observed in the driveway and had seen the International Space Station passing from the W. to the SE in a 4-minute passage. It was about at mag. -1.5 and unobserved at about 00:21 UT which was about 1 minute after the time listed as the End of Astronomical Twilight.

In the later session I observed the stars of Winter in the S. and Mars in the W and Saturn

light pollution and the twilight allows me a little more than 2 days after Full Moon ~~and~~ high in the E. sky. prominent objects were the bright stars of Orion, Aldebaran, Sirius and Canopus in the SE and Mars high in the W. Also seen were Castor and Pollux, Procyon, Saturn in Cancer, the Pleiades, Capella, and Regulus about 3' from the moon.

10:22-10:30 AM
10:32-10:35 AM
10:37-10:40 AM
11

hang clouds. Low some of the bright stars of the Big Dipper high in the W. and Antares and Spica high in the E., with Jupiter in the E. and below it Antares.

T-W. Jan 17-18 04:30-05:30 UT (10:30-11:30 AM) MS
- With a very bright gibbous moon in the constellation Leo high in the E. I observed the bright stars of Orion, Castor, Major, Gemini and Argo, and also Mars high in the W. and Saturn high in the E. in Cancer. Procyon, Regulus, the Pleiades, Aldebaran, and several stars of the constellation Taurus and Canopus in the SE.

W-Fri. Jan 18-19 03:22-03:30 UT (10:30-11:30 AM) MS (10:30-11:30 AM) MS
ms: Earlier in the evening for about 2 min I had observed in the driveway and back yard the International Space Station passing from the W to the SE in a 4-minute passage. It was about mag 1.5 and was seen at about 00:31 UT which was about 1 minute after the time listed as the End of Astronomical Twilight.
In the later session I observed the stars of Winter in the SE and Mars in the W and Saturn

2006

in Cancer in the E. The gibbous moon was seen rising in the E. at the end of the session, but because of being behind the building during all, or most, of the session, it did not interfere very much with observing.

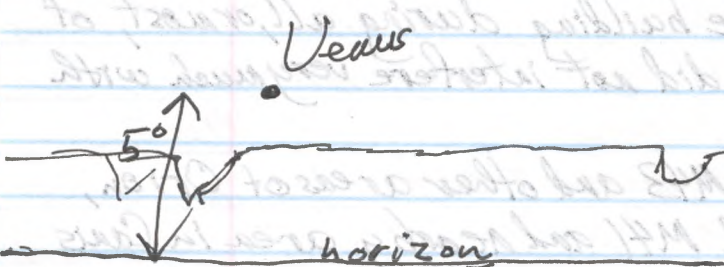
18X50LSb: M42 and M43 and other areas of Orion, M46 and M47, M41 and nearby area in Canis Major, Pleiades, Hyades, NGC 2244 and the nearby area, area of R Lep with the star itself being possibly seen but apparently very faint and near the limit of visibility under the conditions, M35, M36, M37, M38, Mars and nearby area of the bright stars of Aries, Saturn and nearby M44, Regulus and the nearby area.

M. 10:05-10:10 UT FL: laai S?T3 (1/p; gut) ne
5:05-5:10 a.m. E.S.T. FL: laai S?T3 (1/p; gut) ne
- stars of the Big Dipper high in the N., Arcturus and Spica high in the E., Jupiter below them in Libra, and Antares below Jupiter.

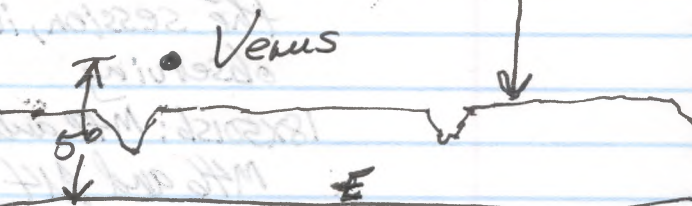
F-S Jan. 20-21 03:10-04:20 UT FL: la S9T6 (1/p) ne; 18X50LSb
ne: stars of winter in the S. Mars in the W., Saturn in the E. in Cancer

18X50LSb: areas of Orion, M42, M43, M41, area of R Lep, M35, M36, M37, M38, M46, M47, NGC 2244 and area, S Mon and the Christmas Tree cluster, Saturn and nearby M44, Mars and some stars of Aries, area of Regulus

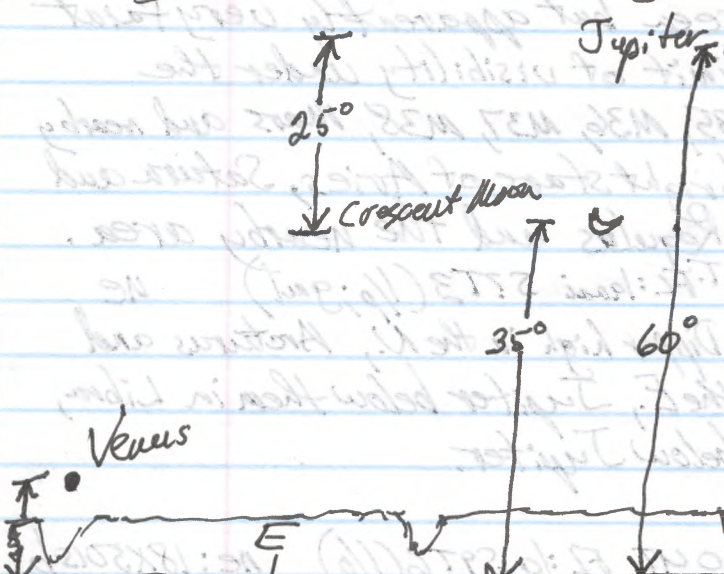
S-S Jan. 21-22 04:30-04:45 UT FL: la S9(?)T4-5 (1/p; ^{light cloud} some) ne
- With some very light cloud in the sky, I observed the stars of winter in the S. with Mars about 35° above the W. horizon and Saturn in Cancer



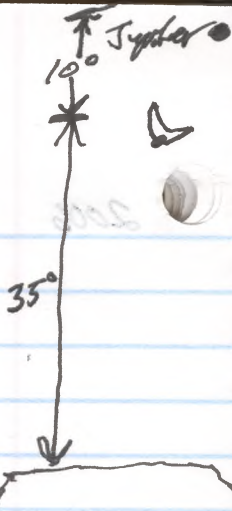
2006, Jan 23, 11:30UT E View to E.
showing Venus in about "mid-twilight."



2006, Jan 24, 11:20UT View to E.
showing Venus, Crescent Moon and Jupiter



2006 Jan 25 11:20UT View to E
showing Venus, Crescent Moon, and Jupiter



2006, Jan 24, 11:20UT View to E.
showing Venus, Crescent Moon and Jupiter

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Very high in the E. between Regulus below and Castor and Pollux above. Castor and Pollux were slightly E. of the zenith.

6:30 a.m. E.S.T.

S.-M. Jan. 22-23 m. 11:30 UT FL: livingroom twl ne
From indoors in the livingroom, I observed Venus up about 5° above the E. horizon. It was about in mid-twilight with the beginning of astronomical twilight having been at 10:55 UT and sun^{rise} listed as going to occur at 12:15 UT

M.-T. Jan. 23-24 02:40-03:20 UT FL: la SQ: IT 4-5 (1/2; some^{cloud}) ne; 18x50ISb
ne: stars of winter in the SE; Mars high in the W., Saturn in the E.

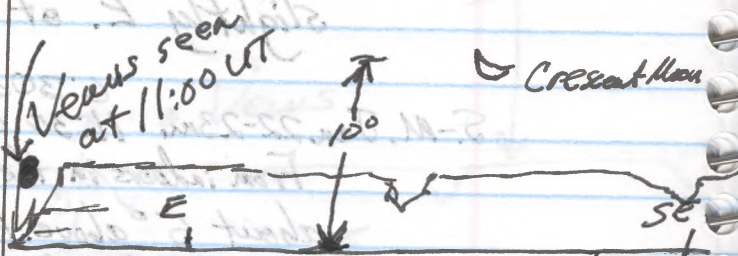
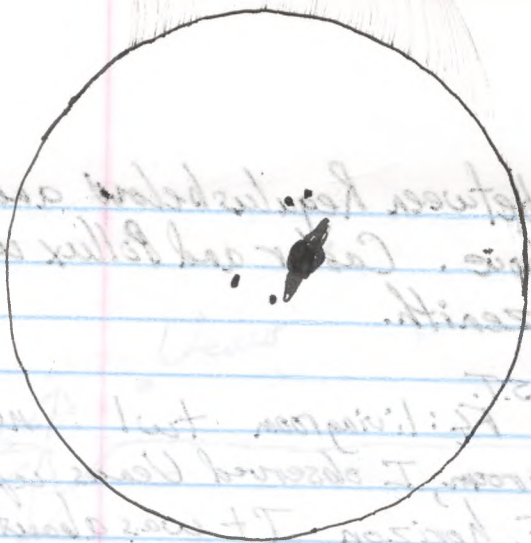
18x50ISb: M42, M43, areas of Orion, M35, M36, M37, M38, Saturn and nearby M44, Mars and some of the stars of Aries, NGC 2244 and nearby S Mon and the Christmas Tree cluster.

6:20-6:25 a.m. E.S.T.
m. 11:20-11:25 UT FL: livingroom twl ne
From indoors in the livingroom, I observed Venus up about 5° in the E. and about 35° up in the ESE, I saw the Crescent Moon which was about 10° below Jupiter.

6:20-6:25 a.m. E.S.T.
T.-W. Jan. 24-25 m. 11:20-11:25 UT FL: lanai twl ne
- Beginning about 26 minutes after the beginning of astronomical twilight and with some cirrus cloud in the sky, I observed some stars of the Big Dipper high in the N., and in the E. Venus about 4 to 5° above the horizon and considerably to the right. the Crescent Moon about 35° above the horizon and Jupiter about 25° further up and to the right.
(see diagram.)

Jupiter

Auroras



Venus seen at 11:00 UT

Crescent Moon

2006, Jan 26 03:30 UT View of Saturn and 4 of its moons in Denise's telescope

2006, Jan 26, 10:40 UT View to ESE showing Crescent Moon, Auroras, and Jupiter

[Faint, mostly illegible handwritten notes on the bottom half of the page, including phrases like 'beginning about 25 minutes after the beginning of astronomical twilight' and 'observed some stars of the cloud in the sky']

2006 W-Th. Jan 25-26 03:55-04:00 UT FL: la 59(?) T6 (1/p) ne; 12 1/2"

- ne: stars of winter high in the SE, with Saturn high in the E and Mars high in the W.

12 1/2": With Denise's 12 1/2" Meade Dobsonian, I observed several objects using the 4 available eyepieces: 32mm, 25mm, 12mm, and 9mm. As in previous years, performance was acceptable at low power but mediocre to poor at higher powers. With the 32mm Klossl eyepiece, I observed Saturn and 4 of its moons (See diagram.), Mars, M42 area and the Trapezium, the Pleiades. With some of the other eyepieces, I also observed Saturn and M42 and the Trapezium. I also observed R Leonis which appeared extremely red; I was using the 12mm eyepiece

Saturn and 4 moons

Trapezium
R Leonis

5:35-5:45 a.m. E.S.T. FL: laae 5(?) T5 (1/p; some cloud) ne
m. 10:35-10:45 UT

- I observed some of the stars of the Big Dipper high in the N, and in the E. the Crescent Moon about 10° above the horizon with Antares about 15° further up and Jupiter about 20° further up in the SE.

At 11:00 UT from inside in the living room I saw Venus rising well to the left and down from the Crescent Moon.

F-S, Jan. 26-27 03:15-04:15 UT FL: la 5-9 T6 (1/p) ne; 18X50156

ne: After attending with Denise the monthly meeting of the Everglades Astronomical Society, I observed for an hour. The stars of summer were in the S. with Saturn very near M44 well up in the E. and Mars in the W. between the bright stars of Aries and the Pleiades.

18X50156: M42, (M43) and areas of ~~Mars~~ Orion, M41,

2006

M46, M47 and areas near them, M35, M36, M37, M38, Pleiades, Hyades, area of R Lep, but the star was not seen, R Leonis and the nearby area, Saturn, and M44, Mars and the bright stars of Aries, NGC 2244 and nearby area including Plaskett's Star, S Mon and the Christmas Tree cluster and the nearby area.

^{5:45 - 6:00 AM E.S.T.}
m. 10:45-11:00 UT FL: lanai SE/T5 (1/p) ne

With astronomical twilight beginning at 10:54 UT, I observed in the E. sky Antares about 30° above the horizon and Jupiter about 55° above the horizon. At 10:58 UT Venus appeared between the roofs of two buildings. Later between 11:04 and 11:07 UT the Crescent Moon rose over the roof of a building across the pond. Earthshine was visible on the moon. The moon was about $5\frac{1}{4}$ hours from New Moon.

F.-S. Jan. 27-28 01:30-03:00 UT FL: (a SE) T4 (1/p; considerable) cloud 18X501sb ne; \wedge

ne: Amid considerable cloud, I observed the stars of winter with high in the W. and Saturn in the E. Canopus was low in the SE.

18X501sb: M42, M43 and other areas of Orion, M35, M36, M37, M38, NGC 2244 and area of Plaskett's Star, the Christmas Tree Cluster and S Mon, Saturn and M44, Pleiades, Hyades, Mars and some of the stars of Aries, some areas of Lepus

S.-S. Jan. 28-29 04:30-04:35 UT FL: (a S) T3 (1/p clouds) ne

- Amid many clouds I saw Saturn and a few stars; Sirius, Procyon, Betelgeuse, Bellatrix, the Belt Stars of Orion, Regulus and γ Leonis and the planet Saturn which was in the constellation Cancer.

Jupiter

← Vega

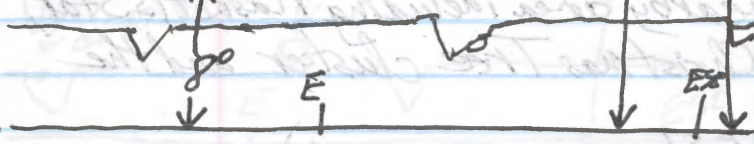
Antares

55°

35°

← Deneb

Venus



2006, Feb. 1, 10:55 UT View to E and ESE showing brilliant Venus and Jupiter

I observed in the E sky Antares about 30° above the horizon and Jupiter about 55° above the horizon. At 10:55 UT Venus appeared between the two stars. At 11:00 UT Venus was between the two stars. At 11:07 UT the Crescent Moon rose over the roof of a building across the road. Earthshine was visible on the moon. The moon was about 51° above from New Moon.

2-2 Jan 08 04:30-05:00 UT (10:00-10:30 AM) - And many stars I saw Saturn and a faint star. Region Betelgeuse, Bellatrix, the Belt Stars of Orion, Rigel and the planet Saturn which was in the constellation Cancer.

2-2 Jan 08 01:30-02:00 UT (7:30-8:00 AM) - And many stars I saw Saturn and a faint star. Region Betelgeuse, Bellatrix, the Belt Stars of Orion, Rigel and the planet Saturn which was in the constellation Cancer.

2-2 Jan 08 01:30-02:00 UT (7:30-8:00 AM) - And many stars I saw Saturn and a faint star. Region Betelgeuse, Bellatrix, the Belt Stars of Orion, Rigel and the planet Saturn which was in the constellation Cancer.

2006 M.-T. Jan. 30-31 04:25-04:55 UT FL: la S9(?) T5 (1/p; ^{cloud} some) ne; 18x50lsb

ne: stars of winter in the S.E. and S.; Saturn very high in the E., Mars in the W. about half way between the bright stars of Aries and the Pleiades.

18x50lsb: M42, M43, area of R Lep. though the star itself was not seen, M46, M47, Pleiades, Hyades, M35, M36, M37, M38, NGC 2244 and nearby area, the Christmas Tree Cluster and S Mon, Saturn and nearby M44, area of R Leonis and the star itself, though in the binoculars it did not appear very bright.

Clouds moved in at the end of the session.

M 5:55-6:00 a.m. E.S.T. FL: lanai twl (cloudy) ne
M 10:55-11:00 UT

Amid numerous clouds, I saw Jupiter very high in the ESE with Antares below it and slightly to the left. Jupiter was up about 55° and Antares up about 35° above the horizon. Vega was seen well up in the NE, and some of the stars of the Big Dipper were high in the N. At 11:34 UT I saw Venus up about 15° or more in the E. Previously it may have been behind a cloud.

T.-W. Jan. 31-Feb. 1. 01:35-03:00 UT FL: la S9(?) T6 (1/p) ne; 18x50lsb

ne: stars of winter in S. and SE., Mars in W., Saturn in E.

18x50lsb: M42, M43, other areas of Orion, M35, M36, M37, M38, M41, M46, M47, NGC 2244 and area of Plaskett's Star, Christmas Tree Cluster and S Mon area, Saturn and M44 (Saturn was right at its edge), area of R Leonis with the star seen quite faintly, area of R Lep with the star perhaps glimpsed only very occasionally and faintly, Pleiades, Hyades, Mars, bright stars of Aries,

M. 10:55-11:00 UT FL: lanai twl ne
Right after the beginning of astronomical twilight, I

M.F. Jan 30-31 04:25-04:32 UT (la 20:17:10) ne; lexord
 ne: stars of ϵ Aurigae in the S.E. and S. ϵ Aurigae very
 high in the E. Mars in the W. about half way
 between the brightness of Aris and the Pleiades.
 lexord: M₂ M₃ area of R Lep through the star
 itself was not seen, M₁ M₂ M₃ M₄ M₅ M₆ M₇ M₈ M₉ M₁₀ M₁₁ M₁₂ M₁₃ M₁₄ M₁₅ M₁₆ M₁₇ M₁₈ M₁₉ M₂₀ M₂₁ M₂₂ M₂₃ M₂₄ M₂₅ M₂₆ M₂₇ M₂₈ M₂₉ M₃₀ M₃₁ M₃₂ M₃₃ M₃₄ M₃₅ M₃₆ M₃₇ M₃₈ M₃₉ M₄₀ M₄₁ M₄₂ M₄₃ M₄₄ M₄₅ M₄₆ M₄₇ M₄₈ M₄₉ M₅₀ M₅₁ M₅₂ M₅₃ M₅₄ M₅₅ M₅₆ M₅₇ M₅₈ M₅₉ M₆₀ M₆₁ M₆₂ M₆₃ M₆₄ M₆₅ M₆₆ M₆₇ M₆₈ M₆₉ M₇₀ M₇₁ M₇₂ M₇₃ M₇₄ M₇₅ M₇₆ M₇₇ M₇₈ M₇₉ M₈₀ M₈₁ M₈₂ M₈₃ M₈₄ M₈₅ M₈₆ M₈₇ M₈₈ M₈₉ M₉₀ M₉₁ M₉₂ M₉₃ M₉₄ M₉₅ M₉₆ M₉₇ M₉₈ M₉₉ M₁₀₀ M₁₀₁ M₁₀₂ M₁₀₃ M₁₀₄ M₁₀₅ M₁₀₆ M₁₀₇ M₁₀₈ M₁₀₉ M₁₁₀ M₁₁₁ M₁₁₂ M₁₁₃ M₁₁₄ M₁₁₅ M₁₁₆ M₁₁₇ M₁₁₈ M₁₁₉ M₁₂₀ M₁₂₁ M₁₂₂ M₁₂₃ M₁₂₄ M₁₂₅ M₁₂₆ M₁₂₇ M₁₂₈ M₁₂₉ M₁₃₀ M₁₃₁ M₁₃₂ M₁₃₃ M₁₃₄ M₁₃₅ M₁₃₆ M₁₃₇ M₁₃₈ M₁₃₉ M₁₄₀ M₁₄₁ M₁₄₂ M₁₄₃ M₁₄₄ M₁₄₅ M₁₄₆ M₁₄₇ M₁₄₈ M₁₄₉ M₁₅₀ M₁₅₁ M₁₅₂ M₁₅₃ M₁₅₄ M₁₅₅ M₁₅₆ M₁₅₇ M₁₅₈ M₁₅₉ M₁₆₀ M₁₆₁ M₁₆₂ M₁₆₃ M₁₆₄ M₁₆₅ M₁₆₆ M₁₆₇ M₁₆₈ M₁₆₉ M₁₇₀ M₁₇₁ M₁₇₂ M₁₇₃ M₁₇₄ M₁₇₅ M₁₇₆ M₁₇₇ M₁₇₈ M₁₇₉ M₁₈₀ M₁₈₁ M₁₈₂ M₁₈₃ M₁₈₄ M₁₈₅ M₁₈₆ M₁₈₇ M₁₈₈ M₁₈₉ M₁₉₀ M₁₉₁ M₁₉₂ M₁₉₃ M₁₉₄ M₁₉₅ M₁₉₆ M₁₉₇ M₁₉₈ M₁₉₉ M₂₀₀ M₂₀₁ M₂₀₂ M₂₀₃ M₂₀₄ M₂₀₅ M₂₀₆ M₂₀₇ M₂₀₈ M₂₀₉ M₂₁₀ M₂₁₁ M₂₁₂ M₂₁₃ M₂₁₄ M₂₁₅ M₂₁₆ M₂₁₇ 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2006

observed some stars of the Big Dipper very high in the N., and Vega and Deneb well up in the NE, and in the E. and ESE brilliant Venus and Jupiter which was up about 55° and Antares and some other stars of Scorpius. (See diagram accompanying previous page.)

W.-Th. Feb 1-2 02:15-02:45 UT FL: Ia S876 (until clouds, ^{rolled in} ne; 18X501sb
ne: stars of winter, in SE and S, Saturn in the E,
Mars in the W.

18X501sb; M42, M43, area of R Lep, but I was not sure of seeing it, M35, M36, M37, M38, M47, but I was not sure of seeing M46 clearly - perhaps because of thin cloud, NGC 2244 and area of Pleistell's Star, the Christmas Tree Cluster and S Mon, Saturn right near the southern edge of M44, area of R Leonis though the star itself may have been seen only briefly and faintly because of the light cloud, Hyades, Pleiades, Mars, bright stars of Aries.

Clouds moved in during the last half of the observing session and the sky became partly cloudy.

M. 10:35 - 10:40 UT FL: Ia S? T2 (1/p; clouds, ^{haze} ne
- Amid clouds and haze, I saw some of the stars of the Big Dipper high in the N., and Vega well up in the NE, and Jupiter up about 50° in the ESE.

Th.-F. Feb. 2-3 04:25-04:30 UT FL: Ia S? T2 (1/p; clouds) ne
Amid clouds I observed briefly some bright objects: Betelgeuse, Bellatrix, Saif, Rigel, the Belt Stars of Orion, Procyon, Castor and Pollux, Saturn, Regulus, γ Leonis, and Capella.

2006 S-S. Feb. 4-5 02:27-02:32 UT FL: Ika S: T2-3 (1/p; gml; ^{cloud} some en) ne

- With some cloud and with a First Quarter Moon high in the W. sky I observed a few objects. The Moon was about 10° down from Mars. Also visible at times (because of the clouds) were the bright stars of Orion, Sirius, Procyon, Saturn in the E, Castor and Pollux, Aldebaran and Capella.

S-M. Feb. 5-6 04:35-04:40 UT FL: Ika S: T5 (1/p; gml) ne

With a gibbous moon in the W about 22 hours after the time of First Quarter and about ^{40 to} 50 degrees above the horizon and about 5 degrees above and slightly to the right from Mars, I observed the bright stars of Orion and Canis Major in the SE, and also Procyon, Castor and Pollux, Saturn (in Cancer), Capella, Aldebaran, Regulus and four other stars in the constellation Leo. Also, I saw several stars in Auriga in addition to Capella.

^{6:05-6:10 a.m. E. ST.}
M. 11:05-11:10 UT FL: Ika S: T5 twl ne

Shortly after the beginning of astronomical twilight (which began at about 10:51 UT) I observed in the E. brilliant Venus about 15° above the horizon and Jupiter in the SE about 60° above the horizon. Also seen were Antares and 3 other stars of Scorpius, and some stars of the Big Dipper high in the N. and in the NE Vega and Deneb.

M-T. Feb. 6-7 03:25-03:30 UT FL: Ika S: T6 (1/p; gml) ne

- With a bright gibbous moon high in the W. only about 25° from the zenith and about 10° NW of Aldebaran, I observed the bright stars of Orion in the S. and Sirius, Procyon, Castor and Pollux, Saturn very high in the E., Regulus and several other stars of

← Vega

← Deneb

Venus

20°

Antares

40°

Jupiter

60°

E

SE

2006, Feb. 7, 11:20 UT View to E and SE.

← Vega

← Deneb

Venus

15°

Antares

40°

Jupiter

60°

SE

2006, Feb. 8, 11:00 UT View to E and SE.

← Vega

← Deneb

← Altair

Venus

100°

Antares

35°

Jupiter

55°

E

SE

2006, Feb. 9, 10:30 UT View to E and SE.

2006

The Constellation Leo in the E.

6:20 - 6:25 a.m. E.S.T.
M. 11:20 - 11:25 UT FL:lanai twl ne

With the glow of twilight very obvious in the E, I observed some stars of the Big Dipper very high in the N, Vega and Deneb in the NE, and in the E, brilliant Venus and in the SE, Antares and Jupiter which was up about 60° above the horizon. (See diagram.)

5:58 - 6:05 a.m. E.S.T.
T.-W. Jan 7-8 M. 10:58 - 11:05 UT FL:lanai twl ne

- Shortly after the beginning of astronomical twilight, I observed some stars of the Big Dipper very high in the N, Vega and Deneb in the NE, and about 15° above the E. horizon brilliant Venus, Antares and other stars of Scorpius were seen in the SE and Jupiter was about 60° above the SE. horizon.

W.-Th. Feb. 8-9 03:20 - 03:45 UT FL:la S(?) T 5 (1/p; gml) ne; 18x50 15b

ne: With a very bright gibbous moon in Gemini and very close to the zenith, I observed the stars of winter in the S. and Saturn in the E. and Mars in the W.

18x50 15b: M42, M43, areas of Orion, ar-ca of R Lep, M46, M47, NGC 2244 and nearby Plaskett's Star and its area, the Christmas Tree Cluster and S Mon, M36, M37, M38, lunar craters on the bright gibbous moon near the zenith.

5:26 - 5:36 a.m. E.S.T.
M. 10:26 - 10:36 UT FL:lanai S(?) T 5 (1/p; gml) ne

- I observed the stars of the Big Dipper high in the N, and in the NE, Vega, Deneb and Altair and in the E and SE, brilliant Venus up about 10° and Antares up about 35° and Jupiter up about 55° .

← Vega

α Dph

stars of Ophiuchus

Antares

40° 60°

SE

← Deneb

← Antares

Venus

E

2006, Feb. 10, 10:50 UT View to E and SE.

Gibbous moon about 2 days before Full Moon.

• Pollox

← E

• Castor

70°

Saturn

M44 - NOT seen naked-eye

S

Approximate Zenith

2006, Feb. 11, 03:35 UT. View very high in the S sky showing gibbous moon and Saturn

2006 Th.-F. Feb. 9-10 04:50-04:55 UT FL: la s(?) T 4 (1/p; gml) ne

I observed briefly with a very bright gibbous moon about 10° W. of the zenith and in Gemini about 4° to the W of Castor. Also visible were the bright stars of Orion, Sirius, Procyon, Saturn, Regulus and Denebda, Mars in the W and Aldebaran.

M. ^{5:50-5:55 a.m. E.S.T.} 10:50-10:55 UT FL: lanai s(?) T 4 (1/p) ^(early twilight) ne.

^{I saw the} stars of the Big Dipper high in the N; Polaris and Kochab in Ursa Minor; the Summer Triangle of stars in the NE, and in the E. brilliant Venus up about 15° and in the SE. Antares and some of the stars of Scorpius and Jupiter. Also seen were some of the stars of the constellation Ophiuchus. (See diagram.)

F.-S. Feb. 10-11 03:35-03:40 UT FL: la s(?) T 4-5 (1/p; gml) ne

I observed briefly with the very bright gibbous moon about 10 degrees from the zenith and about 7° from Saturn and about 5° from Castor. (See diagram.) Also visible were the bright stars of Orion, Cris Major and Auriga and some of the bright stars of the constellation Leo in the E. Also seen were Mars and Aldebaran in the W. The gibbous moon was about 47 hours (about 2 days less 1 hour) from Full Moon which was to be on Feb. 13 at 4:44 UT. Saturn and the moon were listed as being 4° apart (in R.A.) about 11 hours later at 15h UT.

S.-M. M. Feb. 12-13 ^{6:21-6:24 a.m. E.S.T.} 11:21-11:24 UT FL: lanai twl ne

- Well into morning twilight I observed Vega high in the NE and an extremely brilliant Venus in the E. up about 23° above the horizon and among clouds that were prevalent in a large part of the sky.

Jupiter

← Arcturus

Altair

60°

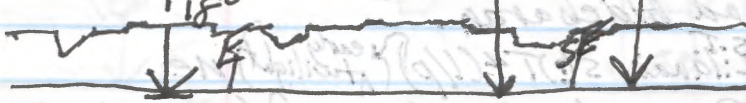
40°

← Deneb

← Altair

Venus

180°



2006, Feb. 14, 10:50 UT: View to East SE.

in the NE, and in the E. Arcturus and Deneb were about 15° and in the SE. Altair and Venus were also seen near 2 stars of the constellation Orion. Also seen were some of the stars of the constellation Orion. (see diagram)

7-2 Feb 10-11 03:35-03:45 UT (see diagram) I observed briefly with the very bright dipbars near about 10 degrees from the zenith and about 7° from Saturn and about 5° from Jupiter. (see diagram) Also visible were the bright stars of Orion, (Rigel, Saiph and Antares) and some of the bright stars of the constellation Orion in the E. Also seen were Mars and Aldebaran in the W. The dipbars were about 45 bars (about 2 bars per bar) from Full Moon which was to be on Feb. 13 at 11:45 UT. Saturn and the moon were listed as being 4° apart in R.A. about 11 hours later at 12:15 UT.

2-11 M. Feb 12-13 11:21-11:34 UT (see diagram) - Well into morning twilight I observed Venus high in the NE and an extremely brilliant Venus in the E. We were about 23° above the horizon and many clouds that were prevalent in a large part of the sky.

2006

M.-T. Feb. 13-14 03:50-03:55 UT FL:la S(?) T 4-5 (1/p; fml) ne

- With a bright Full Moon high in the E., I observed briefly, seeing the bright stars of winter in the S. and SE. - the bright stars of Orion and Canis Major, and also in the sky were Procyon, Castor and Pollux which were very near the zenith with Saturn about 12° E of Castor and near M44.

High in the E, the Full Moon was about 8° below the star Regulus in the constellation Leo. In the W. the planet Mars and the stars Aldebaran and Capella were seen.

5:50-9:55 a.m. E.S.T.
m. 10:50-10:55 UT FL:laai

twl ne

With the Full Moon still up in the West, though it was not in view from where I was observing, and with astronomical twilight having begun just a few minutes before I observed brilliant Venus up about 18° in the E. and in the SE Antares up about 40° and Jupiter up about 60° . The Summer Triangle of Stars ~~was~~ ^{was} in the NE, and some of the stars of the Big Dipper were seen in the N.

T.-W. Feb. 14-15 03:55-04:00 UT FL:la S(?) T 4 (1/p; fml)

ne

With a very bright gibbous moon high in the E. sky and with some cloud in the S. sky, I observed briefly seeing the bright stars of Orion, Sirius, Procyon, Castor and Pollux which were slightly W. of the zenith, Saturn which was slightly E. of the zenith, Mars in the W. sky and Aldebaran and Capella also in the W. In the E, the moon was about 20° below the star Regulus in the constellation Leo.

6:00-6:15 a.m. E.S.T.
m. 11:00-11:15 UT FL:laai and outside twl ne + 18x506

2002

M.F. Feb 13-14 2002

July 20

at 11:00-11:30 P.M. (1/10/02)

With a bright Full Moon high in the E. I observed
 briefly seeing the bright stars of winter in the S.
 out SE - the bright stars of Orion and Cassiopeia
 and also the stars of the Winter Triangle. Castor and
 Pollux which were very near the zenith with
 Saturn about 15° E of Castor and near M4.
 high in the E, the Full Moon was about 8° below
 the star Regulus in the constellation Leo. In the
 W the planet Mars and the stars Aldebaran

and Capella were seen.

m. 10:30-10:55 P.M. Feb 13

With the Full Moon full up the list, though it was
 not in view from where I was observing, and
 with astronomical twilight having passed
 a few minutes before I observed brilliant
 Venus up about 18° in the E. and in the SE.
 Antares up about 40° and Iupiter up about
 60°. The Summer Triangle of stars was
 in the NE, and some of the stars of the
 Big Dipper were seen in the W.

T-W Feb 14-15 03:00-03:30 P.M. (1/10/02)

With a very bright gibbous moon high in the E. sky
 and with some cloud in the S. sky, I observed
 briefly seeing the bright stars of Orion, Sirius, Procyon,
 Castor and Pollux which were slightly W. of the
 zenith. Saturn which was slightly E. of the
 zenith, Mars in the W. sky and Aldebaran and
 Capella also in the W. In the E. the moon
 was about 30° below the star Regulus in the

constellation Leo.

m. 11:00-11:30 P.M. Feb 14-15

2006

ne: Venus, (Antares) in the E. and the Summer Triangle of Stars in the NE and some of the stars of the Big Dipper in the N.

18X5015b: ~~Altair~~ Altair and some stars in the northern part of Ophiuchus as I looked for RS Ophiuchi which was in outburst for the first time in 21 years - since Warren Morrison had discovered the outburst in January 1985. I had found out about the discovery by 2 Japanese amateurs just the previous day and was quite sure that I saw it. I had printed off a map from an AAUO website.

RS Ophiuchi
in outburst
for the first time
in 21 years.

W.-Th. Feb 15-16 02:00-03:00 UT FL: 1a S(1) T6 (4 pig m) ne; 18X5015b

ne: After going out to dinner with Denise to Applebees I had an hour of observing under a clear sky with a bright gibbous moon in the E. but behind the building and not interfering very much with the views of objects to the S. The stars of winter were in the S., with Saturn in the E, and Mars in the W. about 1 or 2 degrees from the Pleiades.

18X5015b: M42, M43, other areas of Orion, M46, M47, NGC 2244, Christmas Tree Cluster, S Mon, Pleiades Star and area near it, M35, M36, M37, M38, Pleiades, Mars, Hyades, R Lep which was very red and very faint for the binoculars, M44 and Saturn nearby.

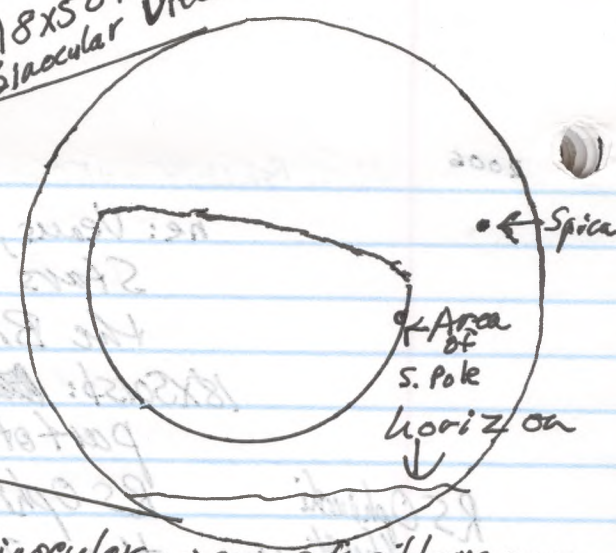
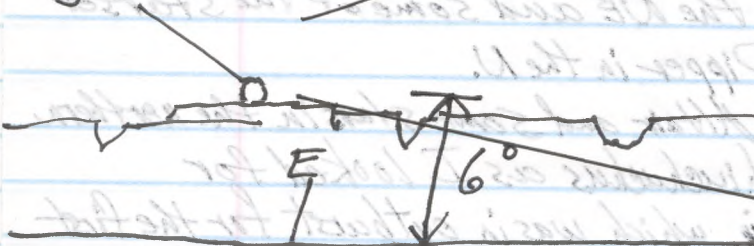
5:30 - 6:05 a.m. EST.
M. 10:30 - 11:05 UT FL: outside and in laaaai before + in twl ne + 18X5015b

ne: Venus very brilliant in the E. and Antares, and Ophiuchi and Summer Triangle of stars in the NE.

18X5015b: Though I had intended to find the

18x50 IS
Binocular View

gibbous moon
rising



2006, Feb. 18, 03:48 UT Gibbous moon rising
over roof of building to the E.

Binocular view of gibbous moon
and Spica

2006

nova now in outburst, RS Ophiuchi, I do not boast of success. I may have seen it but was not certain. I found α and β Ophiuchi and NGC 1C 4665 and Taurus Pontrouski, but had difficulty 'star hopping' quickly to the trio of stars with δ Oph in them and at 11:02 (6:02 a.m. E.S.T) or thereabouts the sprinkler system came on and I went into the lanai where viewing through the screen was unsatisfactory. I had, however, seen the beautiful crescent phase of Venus

Crescent phase of Venus.

F.-S. Feb 17-18 03:45-04:15 UT FL: outside lanai S?T5 (1/p/gml) ne; n ^{18x50sb}
ne: gibbous moon rising over roof to the E. I had read in an e-mail from Ken Kingston of an occultation by the moon of the star Spica predicted for tonight at 03:50 UT (10:50 p.m. E.S.T) for the Kingston area, but did not know what the "parallax factor" would mean in terms of my viewing the event. I did NOT see an occultation.

18x50sb: I was surprised to see Spica, not below the moon, but to the right of, and slightly above the area of the South Pole of the moon. When clearing the roof of the house the moon was about 6° above the horizon, later it was about 8° above the horizon. I saw it as a "kiss".

6:20-6:25 a.m. E.S.T
m. 11:20-11:25 UT FL: outside lanai twl ne; 18x50sb

ne: Well into twilight I saw the Summer Triangle in the NE and brilliant Venus in the E. It was about 15 hours and 20 minutes after the time listed as the greatest brilliancy of Venus on the current elongation; the

2006

time given for that event was ~~20~~ 20 UT on Feb 17.
18x5015b: I observed the crescent phase of Venus

S.-S. Feb. 18-19 02:45-03:20 UT FL: la S?T5 (1/p; some cloud) ne; 18x5015b
ne; stars of winter in the SE and S., Sirius, Canopus,
Saturn, Castor and Pollux, Aldebaran, Capella, Mars,
Pleiades.

18x5015b: M42, M43, other areas of Orion, area of
R Lep and the star itself seen faintly
by times as it appeared to "come and go",
M46, M47, M36, M37, M38, Pleiades, Hyades,
Mars near the Pleiades, M44 and Saturn nearby,
NGC 2244, area of Plaskett's Star, the Christmas Tree
Cluster and S Mon.

5:25 - 6:00 a.m. E.S.T.
M. 10:25 - 11:00 UT FL: outside laai S?T5 (1/p) ne; 18x5015b

ne: brilliant Venus in E and Summer Triangle in NE
18x5015b: Searched for RSOph and probably did see it
but was not absolutely certain which of the stars
was the one I was looking for. It was a matter
of becoming more familiar with the scale of the KAUSC,
map that I was using. I star-hopped to the area
of RSOphiuchi from the area of Taurus Portouski
and specifically from the star 68 Oph which was
marked on the map I was using. I also observed
the crescent phase of Venus.

looked for
RSOph

S.-M. Feb. 19-20 02:45-03:15 UT FL: la S?T45 (1/p; haze, increasing cloud) ne; 18x5015b
ne: stars of winter in the S.; Saturn in the; Mars in
the W.

18x5015b: M42, areas of Orion, M35, M36, M37, NGC 2244,
Plaskett's Star, M47, S Mon, Pleiades, Hyades,
M44 and Saturn.

clouds became much more prevalent during the last

2000

time given for the event was 10:00 AM on Feb 7.
Rexford: I checked the crescent phase of Venus

2-2 Feb 18-19 02:14-03:00 UT File 2575 (lp; somewhat) ne; 182000
ne; stars of water in the SE and S; stars, Capella, Mars,
Saturn, Castor and Pollux, Aldebaran, Capella, Mars,
Polaris.

Rexford: M42 was other stars of Orion, star of
Rigel and the star itself seen faintly
by times as it appeared to "come out of"
M42 M41, M35, M37, M38, Polaris, Rigel,
Mars near the Pleiades, M44 and Saturn nearby.
Rexford: crescent phase of Venus, the Pleiades,
cluster and stars.

M. 10:55-11:00 UT File: 2575 (lp) ne; 182000

ne: brilliant Venus in E and Saturn Triangle in NE
Rexford: searched for R20p and probably did see it
but was not absolutely certain which of the stars
was the one I was looking for. It was a matter
of becoming more familiar with the scale of the AAVSO
map that I was using. I star-hopped to the area
of R20p from the area of the other stars
and specifically from the star R8 Op which was
marked on the map I was using. I also observed
the crescent phase of Venus.

label for
R20p

2-4 Feb 18-20 02:14-03:00 UT File: 2074 (lp; base image) ne; 1
Class / 182000

ne: stars of water in the S; Saturn in the Pleiades
the W.
Rexford: M42, stars of Orion, M35, M37, M38, Rigel,
Mars near the Pleiades, M44 and Saturn.
M44 and Saturn.
Class forms much was present during the last

2006

10 minutes of the session

m. 5:30 - 6:00 a.m. E-ST.
10:30 - 11:00 UT FL: outside lanai S? T5 #1 ul ne; 18x50isb

ne: brilliant Venus up about 15° to 20° . Summer Triangle of stars in the NE; some stars of the Big Dipper in the N and also Polaris.

18x50isb: area of Ophiuchus around the "Taurus Pontowski" and "star hopping" down to the area of the recurrent nova RS Ophiuchi. Though I was not absolutely certain of seeing it, I may well have seen it. I certainly did see the area quite well. I also observed Venus.

area of the
recurrent nova
RS Ophiuchi

M.-T. Feb 20-21 m 5:05-5:40 UT
10:05-10:40 UT FL: outside lanai S? T1 (1/p; fog) ne; 18x50isb

ne: With very severe fog I tried to observe the area of RS Oph, but the fog persisted. I saw the Last Quarter Moon up about 45° to 50° in the SE and Vega in the NE, but for most of the session even Deneb and Altair were not visible to the naked eye. By times Venus was barely visible to the naked eye. Some of the stars of the Big Dipper were visible high in the N. and Arcturus was visible near the zenith.

18x50isb: I observed lunar features on the Last Quarter Moon and the crescent of Venus. I was able on occasion to see the stars of the "Taurus Pontowski" and even the triangle of stars containing ζ Oph, a triangle that is NW of the location of γ Oph and of RS Oph. However, the fog prevented seeing very much in the E. sky.

T.-W. Feb. 21-22 03:00-03:50 UT FL: (a S8) T5 (1/p; haze, ^{some cloud}) ne; 18x50isb
ne: stars of winter; Canopus in SE; Saturn in the E, but just E. of the zenith; Mars in the W.

2006

18X5015b: M42, M43, areas of Orion, M46, M47, M35, M36, M37, M38, Pleiades and Mars nearby, Hyades, NGC 2244, Plaskett's Star, Christmas Tree Cluster and S Mon, M44 and Saturn nearby, R Leocais and area, the area of R Lep.

5:25-5:50 a.m. E.S.T. FL: outside lanai ^{1 cloud} S?T3 (1/p; cut; N) ne; 18X5015b
M. 10:25-10:50 UT

ne: With conditions less than ideal because of a good deal of cloud in the E sky, I observed for about a 1/2-hour. Amid the clouds, I saw brilliant Venus and the Crescent Moon, the latter of which was about 40° up in the SE, and in the N the "Handle Stars" of the Big Dipper, ~~III~~ and Polaris and Kochab.

18X5015b: the stars of the "Taurus Poutiowski" asterism and the "3-star asterism" that includes δ Ser and from there I was quite sure I saw γ Oph and ρ S Oph at about equal magnitudes - at about mag. 6.7 or 6.8. Amid the clouds, I also saw some other stars in the area and the crescent phase of Venus and some of the lunar features of the Crescent Moon.

γ Oph and ρ S Oph of almost identical magnitudes, (Following morning I was unsure that ρ S Oph had been identified correctly and was that bright.)

W-Th. Feb. 22-23 03:05-04:05 UT FL: la S?T3-6 (1/p) ne; 18X5015b
ne: stars of winter, Saturn about 10° E. of the zenith, Mars in the W.

18X5015b: M42, M43, other areas of Orion, M46, M47, NGC 2244, Plaskett's Star, Christmas Tree Cluster and S Mon, M35, M36, M37, M38, Pleiades and Mars; Hyades, area of R Lep, R Leonis seen faintly Saturn and M44.

5:20-6:00 a.m. E.S.T. FL: outside lanai S?T6 - lotertwl. ne; 18X5015b
M. 10:20-10:50 UT
ne: Summer Triangle in NE; brilliant Venus in E, Cr. Moon in ESE, Big Dipper high in NNW, Polaris and Kochab

2006

18X5015b: Taurus Pontowski asterism, and though it appeared faint, I probably got occasional glimpses of Barnard's Star. I examined the area around γ Oph and RS Oph and determined that I had probably misidentified R.S Oph yesterday and from what I saw on this occasion it was considerably fainter than I had estimated it to be the day before. It may have been at mag. 7.0 or fainter. It seems to be fading fairly quickly. (Not helping the situation, though not something I am blaming anyone for, since I was wholly responsible for my error, is the fact that one star was missing on the AAUSO 1744-06 (a) chart - right near the star γ Oph. That star was at mag. about 6.7 or 6.8.) I also observed the crescent phase of Venus and features on the Crescent Moon.

RS Oph

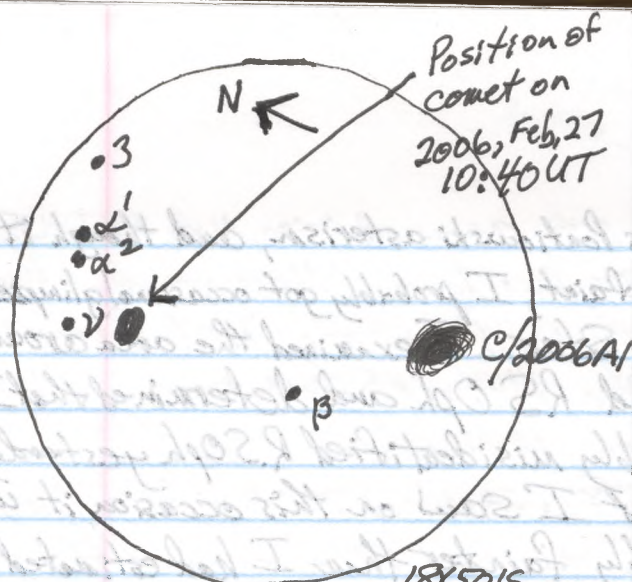


5:20-6:00 a.m. E.S.T. & inside C/P; clouds
 F.S. Feb. 24-25 m. 10:20-11:00 UT FL: outside, lanai S?T<1, ne; 18X5015b

ne: For the second morning in a row, I had clouds. This time I was "tempted into waiting" and had some hope the night clear up. Intermittently and sometimes briefly I had glimpses of Venus in the E., and Vega and Altair in the NE. However, the E. sky did not clear up during the session.

18X5015b: Briefly I had a glimpse of some, or all, of the main stars of the "Taurus Pontowski" asterism, but I did not get to see Comet C/2006 A1 (Pojmanski) which I had become aware of the day before. It was at about mag. 6.5 and located to the lower left of Venus in the morning sky.

-hoped to see
 Comet C/2006 A1 (Pojmanski)
 but did not see it this time.



18X50IS
 2006 Feb. 26: 10:40 UT: Binocular view
 of Comet C/2006 A1 (Pojmanski)

... the comet was at mag. about 6.7 or 6.8. I
 first time I was "trapped into viewing" all
 the way for the second evening in a row. I had clouds
 and sometimes I had glimpses of
 the comet. However, the sky did not clear
 up during the session.
 ... I had a glimpse of some or
 all of the main stars of the Trianguli
 "asteroid" but I did not
 get to see Comet C/2006 A1 (Pojmanski)
 which had become aware of the constellation
 It was at about mag. 2 and located to the
 lower left of beta in the morning sky.

Comet C/2006 A1 (Pojmanski)
 probably not seen this time.
 -top of page

2006 S-S. Feb 25-26 03:00-03:20 UT FL: la S(?) T5-6 (1/2; slight cloud) 18x50sb
ne: stars of winter in the S; Saturn Very High near the zenith; Mars in the W.

18x50sb: M42, M43, M46, M47, M41, M35, M36, M37, M38, NGC 2244, nearby Pleiades star, Christmas Tree asterism and SMC, area of R Lep though the star itself was not detected; R Leonis seen clearly though somewhat faintly in the binoculars, Mars, Pleiades, Hyades, M44 and nearby Saturn.

M. 10:35-11:00 UT FL: outside laaa: S? T5-6 (scattered) 18x50sb
ne: brilliant Venus in the E; Antares and bright stars of Scorpius and Jupiter in Libra high in the SE; Summer Triangle in the NE.

18x50sb: Crescent of Venus, Jupiter, RS Oph - the recurrent nova in outburst and probably at mag. 7.7 or thereabouts; first definite sighting of the Comet C/2006 A1 (Pojmanski). It was probably about mag. 6 - perhaps slightly brighter than predicted. It was easily found $1\frac{1}{2}$ degrees SSE of β Capricorni and $3\frac{1}{2}$ degrees almost directly S of α Capricorni. As always the distinctive pattern of stars near those stars makes them instantly recognizable with ν Cap and ζ Cap being so close to α Cap. The comet was at about RA $20^{\text{h}} 19^{\text{m}}$ Dec. -16° , approximately just SE of where ^{the variable} α Cap is marked on Chart 124 of Uranometria 2000.0 Deep Sky Atlas. In the binoculars I saw no evidence of a tail on the comet at this time. (See diagram.)

RS Oph
-down perhaps to 7.7

Comet C/2006 A1
Pojmanski
at perhaps mag 6.0
(1)



2006 2-27-02-22-03:00-03:00
 2006 2-27-02-22-03:00-03:00
 2006 2-27-02-22-03:00-03:00
 2006 2-27-02-22-03:00-03:00

18x50sp: M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100

19x50sp: M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100

19x50sp: M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100

20x50sp: M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100

21x50sp: M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100

19x50sp
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2006 S.-M. Feb. 26-27 04:20-04:25 UT FL: la S? TG (1/p)

- Under very clear skies I observed the stars of winter and early spring with Orion in the SW and the constellation Leo rising in the E and, in fact, up quite high in the E. Saturn was quite near the zenith ^{clouds} ne; 18X50sb
m: 10:30-10:45 UT FL: outside la S? TG (1/p); very few ne; Jupiter, Venus, Summer Triangle of stars.

Comet C/2006 A1
(Pojmanski)
(2)

18X50sb: I easily found the comet C/2006 A1 (Pojmanski) near γ Capricorni. (See previous page for the accompanying diagram. I may still have been at about mag. 6.0 to 6.4. I also observed the area of α and β Ophiuchi and of Barnard's Star, possibly catching only an occasional glimpse or two of the star itself, and η Taurus Poutrowski asterism. I observed RS Ophiuchi which again was faint at perhaps about mag. 7.8 to 7.9.

RS Oph.

M.-T. Feb. 27-28 02:25-03:15 UT S? TG (1/p; some ^{cloud} obsc.) ne; 18X50sb
ne: stars of winter in the S., constellation Leo in the E, Canopus in the SE, Saturn about 10° SE of the zenith; Mars in the W.

18X50sb: M42, M43, areas of Orion, area of R Lep, though the star itself was not seen, M44, M46, M47, M35, M36, M37, M38, M44 and nearby Saturn, Mars, Hyades, Pleiades, NGC 2244, Plaskett's Star, Christmas Tree asterism and S Mon.

m. 10:25-11:00 UT FL: outside la S? TG (1/p); twl ne; 18X50sb
ne: brilliant Venus about 15° above E horizon near the end of the session; Jupiter very high in the SE; the Summer Triangle in the NE.

18X50sb: starhopping to the area of the recurrent nova RS Oph: α Her, α Oph, the

2006

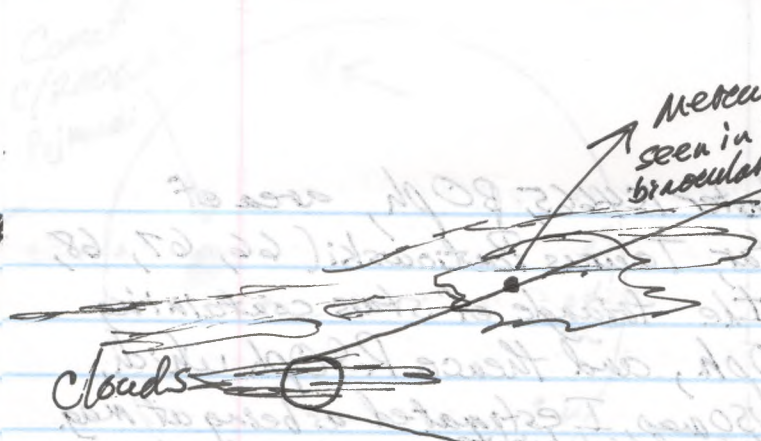
RS Oph
in outburst

Comet
C/2006 A1
(Pojmanski)
(3)

large open cluster IC4665, β Oph, area of
Barnard's Star, Taurus Poutiowski (66, 67, 68,
70 Oph), the triangle of stars containing
 ξ Ser, γ Oph, and the star RS Oph which,
from the AAVSO map, I estimated as being at mag.
8.3. ^{Perhaps it was a bit brighter.} I also observed the globular cluster M14
which was in the area and indicated on the
AAVSO map 1744-06(a). I easily located the
Comet C/2006 A1 (Pojmanski) at about mag. ~~6.5~~^{6.5}
at R.A.: 20h 21m; Dec.: -10.5 degrees, almost precisely
2 $\frac{1}{2}$ degrees due N of the star Nu Cap which is
part of the Alpha Cap pattern of stars. (See Chart
124 of Uranometria 2000.0 Deep Sky Atlas). There was
no tail seen on the comet and ^{the comet} it may have been very
slightly smaller in appearance than previously. (See
diagram.)

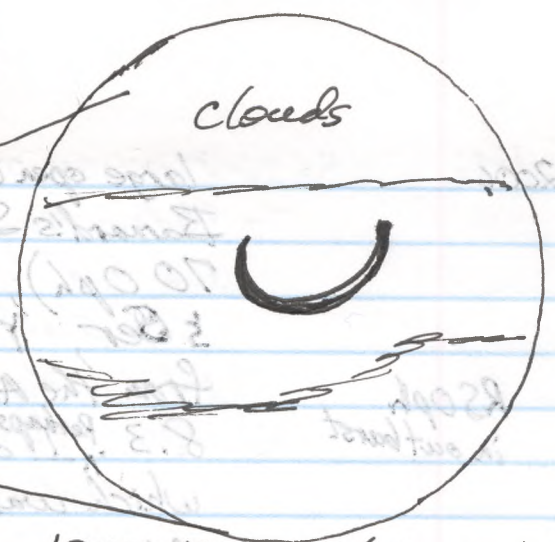
M.-T. Feb. 28 - Mar. 1 ^{along Gulf of Mexico} 23:45 - 00:20 UT Bonita Beach \nearrow twl. ne; 18x50ish
ne: After sunset which was at 23:26 UT (6:26 p.m. EST),
Denise and I arrived at Bonita Beach and I went
along the beach and took a spot from which to observe.
I saw in the W. clouds up from the horizon
for about 15° and in the NW up about 25°.
Later the clouds moved so that a slightly
larger area of the W. and NW sky had
clouds, but otherwise, the remainder of the
sky was about 90% or more cloud-free. However
among the clouds there were "holes" and some
hope of seeing the young moon and Mercury -
possibly. Only later did I view them -
after I thought I would not be able to
do so.

18x50ish: With binoculars, I scanned the



horizon
Gulf of Mexico

2006, Mar. 1 00:06 - view of Crescent Moon
and 00:40 - view of Mercury



18X50 IS binocular view of
Young Moon - 23h35m old

Clouds
(3)

18x50 IS: With binoculars, I scanned the
 after I thought I would not be able to
 possibly. Only later did I view them
 hope of seeing the young moon and Mercury
 among the clouds there were "holes" and some
 sky was about 90% or more cloud-free. However
 clouds, but otherwise, the remainder of the
 layer over of the W. and W. sky had
 later the clouds moved so that a slightly
 for about 15° and in the W. up about 25°.
 I scanned the W. clouds up from the horizon
 along the back and took a spot from which to have
 Daise and I arrived at Gault's Bay and I went
 re: After sunset, which was at 23:56 UT (18:56 pm EST)
 M-F Feb 28 - Mar 1 23:45 - 00:20 UT Gault's Bay, Feb 28; 18x50 IS

2006

Young Moon
23^h35^m old.
seen for over
2 min.

Mercury
seen for
about 5 min

"openings" in the clouds. — for about 20 minutes or more. Then suddenly at 00:08 UT (7:08 p.m. EST) I spotted the very young moon — only 23^h35^m old — among the clouds. It was in a break in the clouds that allowed me to see it for 2 minutes — until 00:10 UT (7:10 p.m. E.S.T.) Then later, at about 00:10 UT (7:10 p.m. E.S.T.) I saw Mercury in the binoculars in a very large "break" in the clouds and was able to watch it until about 00:15 UT (7:15 p.m. E.S.T.). Mercury was very bright in the binoculars, but was not seen naked-eye. The moon was scheduled to set at 00:26 UT (7:26 p.m. EST) just 58 min after sunset which was at 23:28 (6:28 p.m. E.S.T.), but we did not wait at the beach until the time of moonset.

03:40-04:05 UT FL: 1a S8T6 (clouds later ^{in session}) ne; 18X50LSb
ne: stars of summer in SW; Mars in W., Saturn E of the zenith.

18X50LSb: M42, M43, area of Orion, area of R Lep but the star itself was not seen, M44, M46, M47, NGC 2244, Plaskett's Star, 'Christmas Tree' asterism and S Mon, M35 and area, Merades and Mars, Hyades, R Leonis seen faintly, M44 and Saturn nearby.

5:30-6:00 a.m. E.S.T.
m. 10:30-11:00 UT FL: outside laani S^oT6 (1p); tw1 ne; 18X50LSb
ne: brilliant Venus up about 20° at beginning of the session (about 28° at the end of the session) dominating the E. sky, the Summer Triangle in the NE, Jupiter very high in the SE above and to the right from Antares and the bright stars of Scorpius.

18X50LSb: Star-hopping to R. S Oph, the recurrent nova: α Her, α Oph, γ 4665, β Oph, area of Barnard's Star, Taurus Poniowski asterism (66, 67, 68, 70 Oph), the triangle of stars containing δ Ser, γ Oph and

2006

RS Oph
in outburst
at mag. 8.2.

Comet
C/2006 A1
(Pojmanski)
now in
Aquila
(4)

thence RS Oph, which from stars on the AAUSO chart I estimated at mag 8.2. I also observed M14. I was 90% sure I was able to see XX Oph and it may have been at mag 9.0 to 9.3 (I would like to confirm it in my next observing session.) Its fading seems to have slowed down considerably, and it may possibly remain in the binocular range for longer than was earlier expected. I easily located the comet C/2006 A1 (Pojmanski) which I estimated as being at about mag. 6.6. It was at about R.A.: 20h 23.5m; Dec.: -7.9° - now about 0.7° north of the Aquila-Capricornus border. (On Chart 124 of the Uranometria 2000.0 DRA, it was 1/2° SE of the variable star XZ Aquilae.) No tail was seen, but the coma appeared about as large as on the previous occasion.

W.-Th. Mar. 1-2 02:55-03:35 UT S8T5 (1/p; some haze) ne; 18X5015b
ne: stars of winter in the SW; Saturn very high in the E; Mars in the W.

18X5015b: M42, M43, areas of Orion, area of R Lep, but the star itself was not seen, M46, M47, M35 and area, M36, M37, M38, NGC 2244 and area, Plaskett's Star, Christmas Tree asterism, S Mon, M44 and Saturn nearby, R Leonis seen faintly, Pleiades, Mars, Hyades.

5:30-5:50 a.m. E.S.T
M. 10:30-10:50 UT FL: outside laaaai S7T6; tw1 ne; 18X5015b
ne: brilliant Venus in E; Jupiter very high in SE; Antares and bright stars of Scorpius high in SE; Summer Triangle in NE.

18X5015b: Starhopping to RS Oph: α Her, α Oph, β Oph, near IC 4665, area of Barnard's Star (with hints of occasional glimpses of the star

2002

R2 Opl
in outburst
at mag 8.2

Count
Classical
(Pulsar?)
mag 14
mag 10
Apl 10
(H)

these R2 Opl which form stars at the AAOO class
I estimated at mag 8.2. I also observed M14
I was 90% sure I was able to see XX Opl and
It may have been at mag 9.0 to 9.3 (I would like to
confirm it in my next observing season). The finding
seems to have about been considerably and it may
possibly form in the broader range for longer than
was earlier expected. I easily located the count
Classical (Pulsar?) which I estimated as being
at about mag 10.6. It was at about RA: 20h 52m
Dec: -7.9 - from about 0.7 north of the Aquila
Caracorum cluster. (On Chart 124 of the
Messier star X 5 Aquila). No tail was seen, but
the core spread about as large as other previous
occasions.

W-7h. Mar-2 03:22-03:32 UT 28.25 (1.1, somewhat) no; 18x200
no: stars of water in the SW; 20 turn visible in
the E; Mag in the W.
18x200: M3, M13, area of Orion, area of R14
but the stars still were not seen M14 M17
M3 and area M3, M13, M37, M38, M39, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100, M101, M102, M103, M104, M105, M106, M107, M108, M109, M110, M111, M112, M113, M114, M115, M116, M117, M118, M119, M120, M121, M122, M123, M124, M125, M126, M127, M128, M129, M130, M131, M132, M133, M134, M135, M136, M137, M138, M139, M140, M141, M142, M143, M144, M145, M146, M147, M148, M149, M150, M151, M152, M153, M154, M155, M156, M157, M158, M159, M160, M161, M162, M163, M164, M165, M166, M167, M168, M169, M170, M171, M172, M173, M174, M175, M176, M177, M178, M179, M180, M181, M182, M183, M184, M185, M186, M187, M188, M189, M190, M191, M192, M193, M194, M195, M196, M197, M198, M199, M200, M201, M202, M203, M204, M205, M206, M207, M208, M209, M210, M211, M212, M213, M214, M215, M216, M217, M218, M219, M220, M221, M222, M223, M224, M225, M226, M227, M228, M229, M230, M231, M232, M233, M234, M235, M236, M237, M238, M239, M240, M241, M242, M243, M244, M245, M246, M247, M248, M249, M250, M251, M252, M253, M254, M255, M256, M257, M258, M259, M260, M261, M262, M263, M264, M265, M266, M267, M268, M269, M270, M271, M272, M273, M274, M275, M276, M277, M278, M279, M280, M281, M282, M283, M284, M285, M286, M287, M288, M289, M290, M291, M292, M293, M294, M295, M296, M297, M298, M299, M300, M301, M302, M303, M304, M305, M306, M307, M308, M309, M310, M311, M312, M313, M314, M315, M316, M317, M318, M319, M320, M321, M322, M323, M324, M325, M326, M327, M328, M329, M330, M331, M332, M333, M334, M335, M336, M337, M338, M339, M340, M341, M342, M343, M344, M345, M346, M347, M348, M349, M350, M351, M352, M353, M354, M355, M356, M357, M358, M359, M360, M361, M362, M363, M364, M365, M366, M367, M368, M369, M370, M371, M372, M373, M374, M375, M376, M377, 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M1608, M1609, M1610, M1611, M1612, M1613, M1614, M1615, M1616, M1617, M1618, M1619, M1620, M1621, M1622, M1623, M1624, M1625, M1626, M1627, M1628, M1629, M1630, M1631, M1632, M1633, M1634, M1635, M1636, M1637, M1638, M1639, M1640, M1641, M1642, M1643, M1644, M1645, M1646, M1647, M1648, M1649, M1650, M1651, M1652, M1653, M1654, M1655, M1656, M1657, M1658, M1659, M1660, M1661, M1662, M1663, M1664, M1665, M1666, M1667, M1668, M1669, M1670, M1671, M1672, M1673, M1674, M1675, M1676, M1677, M1678, M1679, M1680, M1681, M1682, M1683, M1684, M1685, M1686, M1687, M1688, M1689, M1690, M1691, M1692, M1693, M1694, M1695, M1696, M1697, M1698, M1699, M1700, M1701, M1702, M1703, M1704, M1705, M1706, M1707, M1708, M1709, M1710, M1711, M1712, M1713, M1714, M1715, M1716, M1717, M1718, M1719, M1720, M1721, M1722, M1723, M1724, M1725, M1726, M1727, M1728, M1729, M1730, M1731, M1732, M1733, M1734, M1735, M1736, M1737, M1738, M1739, M1740, M1741, M1742, M1743, M1744, M1745, M1746, M1747, M1748, M1749, M1750, M1751, M1752, M1753, M1754, M1755, M1756, M1757, M1758, M1759, M1760, M1761, M1762, M1763, M1764, M1765, M1766, M1767, M1768, M1769, M1770, M1771, M1772, M1773, M1774, M1775, M1776, M1777, M1778, M1779, M1780, M1781, M1782, M1783, M1784, M1785, M1786, M1787, M1788, M1789, M1790, M1791, M1792, M1793, M1794, M1795, M1796, M1797, M1798, M1799, M1800, M1801, M1802, M1803, M1804, M1805, M1806, M1807, M1808, M1809, M1810, M1811, M1812, M1813, M1814, M1815, M1816, M1817, M1818, M1819, M1820, M1821, M1822, M1823, M1824, M1825, M1826, M1827, M1828, M1829, M1830, M1831, M1832, M1833, M1834, M1835, M1836, M1837, M1838, M1839, M1840, M1841, M1842, M1843, M1844, M1845, M1846, M1847, M1848, M1849, M1850, M1851, M1852, M1853, M1854, M1855, M1856, M1857, M1858, M1859, M1860, M1861, M1862, M1863, M1864, M1865, M1866, M1867, M1868, M1869, M1870, M1871, M1872, M1873, M1874, M1875, M1876, M1877, M1878, M1879, M1880, M1881, M1882, M1883, M1884, M1885, M1886, M1887, M1888, M1889, M1890, M1891, M1892, M1893, M1894, M1895, M1896, M1897, M1898, M1899, M1900, M1901, M1902, M1903, M1904, M1905, M1906, M1907, M1908, M1909, M1910, M1911, M1912, M1913, M1914, M1915, M1916, M1917, M1918, M1919, M1920, M1921, M1922, M1923, M1924, M1925, M1926, M1927, M1928, M1929, M1930, M1931, M1932, M1933, M1934, M1935, M1936, M1937, M1938, M1939, M1940, M1941, M1942, M1943, M1944, M1945, M1946, M1947, M1948, M1949, M1950, M1951, M1952, M1953, M1954, M1955, M1956, M1957, M1958, M1959, M1960, M1961, M1962, M1963, M1964, M1965, M1966, M1967, M1968, M1969, M1970, M1971, M1972, M1973, M1974, M1975, M1976, M1977, M1978, M1979, M1980, M1981, M1982, M1983, M1984, M1985, M1986, M1987, M1988, M1989, M1990, M1991, M1992, M1993, M1994, M1995, M1996, M1997, M1998, M1999, M2000, M2001, M2002, M2003, M2004, M2005, M2006, M2007, M2008, M2009, M2010, M2011, M2012, M2013, M2014, M2015, M2016, M2017, M2018, M2019, M2020, M2021, M2022, M2023, M2024, M2025, M2026, M2027, M2028, M2029, M2030, M2031, M2032, M2033, M2034, M2035, M2036, M2037, M2038, M2039, M2040, M2041, M2042, M2043, M2044, M2045, M2046, M2047, M2048, M2049, M2050, M2051, M2052, M2053, M2054, M2055, M2056, M2057, M2058, M2059, M2060, M2061, M2062, M2063, M2064, M2065, M2066, M2067, M2068, M2069, M2070, M2071, M2072, M2073, M2074, M2075, M2076, M2077, M2078, M2079, M2080, M2081, M2082, M2083, M2084, M2085, M2086, M2087, M2088, M2089, M2090, M2091, M2092, M2093, M2094, M2095, M2096, M2097, M2098, M2099, M2100, M2101, M2102, M2103, M2104, M2105, M2106, M2107, M2108, M2109, M2110, M2111, M2112, M2113, M2114, M2115, M2116, M2117, M2118, M2119, M2120, M2121, M2122, M2123, M2124, M2125, M2126, M2127, M2128, M2129, M2130, M2131, M2132, M2133, M2134, M2135, M2136, M2137, M2138, M2139, M2140, M2141, M2142, M2143, M2144, M2145, M2146, M2147, M2148, M2149, M2150, M2151, M2152, M2153, M2154, M2155, M2156, M2157, M2158, M2159, M2160, M2161, M2162, M2163, M2164, M2165, M2166, M2167, M2168, M2169, M2170, M2171, M2172, M2173, M2174, M2175, M2176, M2177, M2178

2006

RSoph

Comet
C/2006 A1
(Pojmański)
(5)

itself), the Taurus Pictowski asterism (66, 67, 68, 70 Oph), the triangle of stars containing ϵ Ser, γ Oph and the new RS Oph. From comparison stars on AAUSO map 1744-06 ca), I estimated it to be at mag. 8.3. I also was much more certain than previously of seeing XX Oph at mag. 9.0 to 9.3. I easily located Comet C/2006 A1 (Pojmański) which I estimated at mag. 6.5 - possibly a bit brighter than previously and I thought I saw a hint of a tail (for the first time in my observations of this comet). Is it possible that there has been a slight outburst in this comet, or was it the result of having fairly good transparency while observing it this morning? I estimated its position as R.A.: 20h 26.5 m; Dec: -05.3° (On Chart 124 of Uranometria 200.0 DSA, it is located about $\frac{1}{4}^\circ$ NW of the variable star V1483.)

FL: la
Th.-F. Mar. 2-3 04:00-0405 UT ST(?) TO

ne
- Orion in the SSW, Sirius, Procyon, Castor and Pollux, Aldebaran in the SW, Mars in the W, Saturn near the

zenith.

5:48-6:00 a.m. E.S.T
M. 10:48-11:00 UT FL: outside laani twl ne; 18X5015b

ne: After the beginning of astronomical twilight with a considerable amount of scattered cloud in the sky I observed amid the cloud brilliant Venus in the E, the Summer Triangle in the NE, and Jupiter high in the SE.

18X5015b: Venus, Jupiter. Though I saw some of the stars in the area of the nova RS Oph, and may even have briefly seen it, I did not make a careful observation nor obtain an accurate estimate of magnitude. There was too much

graph

Const
Classical
(Polaris)

(b)

the Tower Partowski asterism (see p. 67, 68, 70 OJ), the triangle of stars containing ϵ and γ and the α star. From comparison stars on A150 map (1744-06 Co), I estimated it to be of mag. 8.3. I also was much more certain than previously of seeing χ Opl at mag. 9.0 to 9.3. I easily located Const (Polaris) which I estimated at mag. 6.5 - possibly with brighter stars nearby. I thought I saw a faint star tail

(For the fact that in my observations of this const. It is possible that there has been a slight outburst in this const or was it the result of having fairly good transparency while observing it this morning? I estimated its position as R.A.: 20h 22m 20s; Dec: -02.3°. Const χ of magnitude 9.0-9.3. It is located about 1/2° NW of the variable star V1483.)

T.F. Mar 23 04:00-05:00 UT 2010

- Orion in the SW, Sirius, Procyon, Castor and Pollux, Aldebaran in the SW, Mars in the W, Saturn near the

18x5015b: Venus, Jupiter. Though I saw some of the stars in the area of the new R2 Opl, and may ever have briefly seen it, I did not make careful observations nor obtain an accurate estimate of magnitude. There was too much no: After the passing of astronomical twilight with a considerable amount of scattered cloud in the sky I observed near the cloud belt but Venus in the E, the Summer Triangle in the NE, and Jupiter high in the SE.

2006

interference from the clouds. Regarding the comet C/2006 A1 (Pojmanski) there was simply too much cloud in that area of the sky and in this session I simply did not see it.

F.-S. Mar. 3-4 03:20-04:00 UT FL: 1a S²T 4-5 (1/p; some haze ^{and some cloud}) ne; 18X5015b
ne: Saturn near the zenith, Mars about 30° above the W. horizon; Orion in the SW.

18X5015b: M42, other areas of Orion, area of R Lep but the star itself was not seen, M46, M47, NGC 2244 and area nearby, Pleiades Star, 'Christmas Tree' asterism, M35, M36, M37, M38, R Leonis - fairly faint and surrounding area, M41, Pleiades, Mars, Hyades.

5:50 - 5:55 a.m. E.S.T.
M. 10:50 - 10:55 UT FL: outside lanai twl ne; 18X5015b

ne: I had not set the alarm and was late getting up and at the time I started observing, astronomical twilight had begun about 20-25 minutes before. I saw Venus, the Summer Triangle and a few other stars.

18X5015b: I saw some stars in Ophiuchus and in the area of RS Oph but was not sure of seeing the nova nor of making an estimate. Though I saw the α Cap complex of stars and some others in the area I did not knowingly see the comet which by now was considerably to the N and in the constellation Aquila.

S.-S. Mar. 4-5 02:20-02:50 UT FL: 1a S²T 5 (1/p some haze + cloud) ne; 18X5015b

ne: stars of winter in the S; Mars and Cr. Moon in the W. Saturn about 10° E. of the zenith.

18X5015b: M42, areas of Orion, M46, M47,

interference from the clouds. Regarding the comet
Class A1 (Pineapple) there was simply too much
cloud in that area of the sky and in this
season I simply did not see it.

2-2 Mar 3-4 03:30-04:00 UT File 23714-21 (1p; some dark) no; 18x250sp
no: Saturn near the zenith, Mars about 30° above the
W. horizon; Orion in the SW.

18x250sp: M42, other stars of Orion, and a few
but the star itself was not seen. M42, M43,
M44, Pleiades, Mars, Hyades.
M44, Pleiades, Mars, Hyades.
M44, Pleiades, Mars, Hyades.

M. 18:50-19:50 UT File: 23714-21 (1p; some dark) no; 18x250sp
no: I did not set the alarm and was late getting up
and at the time I started cleaning, astronomical
twilight had begun about 30-35 minutes before
I saw through the Surveyor tripod camera
other stars.

18x250sp: I saw some stars in Orion and
in the area of Rigel but was not sure
of seeing the new bar of nebulosity on
estimate. Though I saw the top
cap of stars and some others in the
area I did not know if see the comet
which by now was considerably to the N and
in the constellation Aquila.

2-2 Mar 4-5 03:30-04:00 UT File 23714-21 (1p; some dark) no; 18x250sp
no: Stars of winter in the S; Mars and C. Orion in the
W. Saturn about 10° E. of the zenith.
18x250sp: M42, area of Orion, M42, M43

2006

NGC 2244, Plaskett's Star, Christmas Tree asterism and S Mon, M35, M36, M37, M38, Pleiades, Hyades, Mars, lunar craters, R Leonis and area, M44 and Mars nearby, M41. (some haze & cloud)

m. 10:28 - 10:50 UT FL: outside lanai S? T4-S_N; twl ne; 18X50ISb

ne: brilliant Venus, Jupiter, Summer Triangle, & Oph.

Before the beginning of twilight, the transparency was not good - with haze and some cloud especially at lower altitudes.

18X50ISb: IC 4665, Taurus Ponticowski asterism,

the triangle containing δ Ser, RSOph which I estimated as mag. 8.5. I searched for Comet C/2006 A1 (Pojmanski) and eventually found it in Aquila, very roughly between the α Capricorni complex of stars and the stars of Delphinus. The comet may have been about mag. 6.5 to 6.8. I did not notice any tail, but the conditions were certainly not ideal. By the time I found the comet, twilight may have begun.

RSOph
(mag. 8.5)

Comet C/2006 A1
(Pojmanski)
(6)

S.-M. Mar. 5-6 07:00 - 05:10 UT S? T4-S (lp; Aquil; ^{haze} some) ne

- I observed for about 10 minutes with the First Quarter Moon about 10°-15° above the W horizon at the beginning of the session, Saturn about 20° to the WSW of the zenith and the constellation Leo and the star Spica seen in the E above the roof and Arcturus in the NE. Betelgeuse and Rigel were in the SW. Sirius and Procyon were in the S. and Castor and Pollux were very high in the SW.

m. 10:21 - 10:50 UT FL: outside lanai S? T4 (lp; haze) ne; 18X50ISb

ne: brilliant Venus in the E.; Jupiter very high in the

2006

SE.

RS Oph
mag. 8.5

Comet
C/2006 A1
(Pojmanski)
(7)

18X50LSb: Crescent of Venus, Jupiter and two of its moons, M4; starhopping to RS Oph: α Her, α Oph, 1c4665 and γ Oph, the "Taurus Pontowski" asterism, the triangle of stars containing δ Ser, γ Oph and thence to RS Oph which was at about mag. 8.5 or thereabouts. In order to locate the comet C/2006 A1 (Pojmanski), I tried to "starhop" from the " α Capricorni complex of stars," but found it easier to "starhop" from the bright stars of Delphinus. Its position was about R.A.: $20^h 38^m$; Dec. $+6.0$ (On Chart 84 of Uranometria 2000.0, the location is about $1\frac{1}{2}^\circ$ SE of the globular cluster NGC 6934.) I estimated its magnitude as about 6.7. Because of the transparency which was very mediocre I did not see the tail distinctly this morning, but at times there seemed to be a hint of the tail. It was certainly not as clearly seen as on the morning of March 2nd.

M.-T. Mar. 6-7 03:10 - 03:45 UT FL: α S8 T2-5 varied ^{some cloud, haze} ne; 18X50LSb ne: bright stars of Orion in SW, Saturn near the zenith, Arcturus in the NE, constellation Leo very high in the E, Castor and Pollux W. of the zenith, Procyon and Sirius in the S; bright First Quarter Moon in the W.

18X50LSb: M42 and other areas of Orion, NGC 2244 and nearby Plaskett's Star, "Christmas Tree" asterism and S Mon, M46 (faint) and M47, M44 and Saturn nearby, R Leonis and area,

182501: Crescent of stars, two toward two of its arms. Mt. Starling to R204: other a 4th, east and 7th, the towers. Particular "star" the triangle of stars containing 2nd, 7th and hence to R204 which was at about mag 8.2 or thereabouts. In order to locate the

R204
mag 8.2

Const. of (A1) (pointing) found to "star" from the "Crescent" center of stars, but found it easier to "star" from the bright stars of Delphinus. Its location was about A.A.: 20° 38' Dec. 10° 0' (Or Chart 84 of Navigator 2000.0, the location is about 1 1/2° SE of the globular cluster NGC 6934). I estimated its magnitude as about 6.7. Because of the transparency which was very bad here I did not see the tail distinctly this morning, but at times there seemed to be a hint of the tail. It thus certainly not as clearly seen as on the morning of March 2.

Const. A1
Class 6A1
(9)

M.T. Mar. 6-7 03:10-03:45 UT Feb. 27-28 (2nd phase) 182501: Alt. and other arms of Orion, however First Quarter Moon in the W. South, proper and 2nd in the 2; bright upright in the E, (Cassiopeia) in the W of the South. Antares in the W, Castor in the W. no. bright stars of Orion in 2nd, 3rd and 4th. M.T. Mar. 6-7 03:10-03:45 UT Feb. 27-28 (2nd phase) 182501: Alt. and other arms of Orion, however First Quarter Moon in the W. South, proper and 2nd in the 2; bright upright in the E, (Cassiopeia) in the W of the South. Antares in the W, Castor in the W. no. bright stars of Orion in 2nd, 3rd and 4th.

2006

Lunar craters on the First Quarter Moon.

5:28-5:52am E.S.T.
m. 10:28-10:52 UT FL: S(?)T5 (some haze + ^{cloud} cirrus) NE; 18X5015b

ne: Venus, Summer Triangle in the NE, Antares and bright stars of Scorpius high in the SE; Jupiter very high in the SE.

18X5015b: Venus, Jupiter, M4 in Scorpius seen faintly, α Oph, IC4665 and β Oph, the "Taurus Pontowski" asterism, the triangle of stars containing δ Ser, γ Oph RSOph which I estimated as being at mag. 8.5; bright stars of Delphinus, the comet C/2006 A1 (Pojmanski) which was at about R.A.: 20h 41.5m; Dec.: +08°20' (See Chart 84 of the Uranometria 2000.0 DSA). It was about 2° SSE of K Del. I estimated its mag. as about 6.7. I thought I saw a hint of a tail going upward, but it was not very distinct

RS Oph
(mag. 8.5)

Comet
C/2006 A1
(Pojmanski)
(8)

T.-W. Mar. 7-8 03:00-03:20 UT FL: la S(?)T5 (lp; gm) ne; 18X5015b
ne: Saturn ~~slightly~~ near the zenith; a bright gibbous moon about 25° W. of the zenith; Orion in the SSW; Arcturus in the NE; Mars and Aldebaran in the W.

18X5015b: M42 and other areas of Orion, M41, M46 (seen faintly) and M47, Nac 2244, Plaskett's Star, 'Christmas Tree' asterism and S Mon, M44 and Saturn, R Leo's and area, Hyades and Mars, Pleiades, lunar craters on the 8-day-old moon.

5:22-5:50am E.S.T.
m. 10:22-10:50 UT FL: outside lanai (S?T6 (lp)); twl ne; 18X5015b

ne: brilliant Venus in E, Summer Triangle in NE, Antares and bright stars of Scorpius high in the SE, Jupiter very high in the SE.

June crescent on the First Quarter Moon.
M. 10:28-10:32 UT 2:22-2:25 AM EDT
cloud
19x50sp: Venus in E. Summer Triangle in NE. Antares
and bright stars of Scorpion high in the SE. Jupiter
very high in the SE.

19x50sp: Venus, Jupiter, M4 in Scorpion
seen faintly. 4 Obj. IC 4642 and B Obj.
the Tammann-Panofsky asterism, the
triangle of stars containing 2 star 4 Obj.

8.2. Bright stars of Delphinus, the comet
C/2002 A1 (Panofsky) which was at about
RA: 20h 45m; Dec: +08° 30'. (See Chart 84)

of the line between 2000.0 (2A) I+ was about
2° SSE of K Del. I estimated it was as about
10.7. I thought I saw a hint of a tail going
upward, but it was not very distinct.

8.2 Obj
(Mag. 8.2)

Comet
C/2002 A1
(Panofsky)

T-10. March 8 03:00-03:20 UT 10:25-10:55 PM EDT
19x50sp: Mr. Saturn's light near the zenith; a bright globe
near about 35° W. of the zenith. Other in the
SW. Antares in the NE. Mars and Aldebaran
in the W.

19x50sp: Mr. Saturn and other members of Orion, M41,
M42 (Green Point), and M43. Iac 2544,
Ptolemy's Star, Christmas Tree, asterism and
Zion, Mr. and Mrs. Saturn, Pleiades and other
hyades and Mrs. Pleiades, June crescent
on the 8-day-old moon.

M. 10:28-10:32 UT 2:22-2:25 AM EDT
19x50sp: Venus in E. Summer Triangle in NE. Antares
and bright stars of Scorpion high in the SE. Jupiter
very high in the SE.

2006

RS Oph
(mag. 8.6)

Comet
C/2006 A1
(Pojmanski)
(9)

18X5015b: Venus; Jupiter and 3 of its moons; 2 Her
α Oph, IC4665, β Oph, "Taurus Poutrowski"
asterism, area of Barnard's Star with
probable glimpses of the star itself, the triangle
of stars including δ Ser, γ Oph, RS Oph
which I estimated to be at mag 8.6; M14;
bright stars of Delphinus, the comet
C/2006 A1 (Pojmanski) which was at about
R.A.: 20h 45.1m; Dec.: +10° 48' - about 1 1/2
degrees ENE of Kappa Del. I estimated
the mag. to be 6.8. I was almost certain
of seeing a faint tail extending upward 1 1/4
to the star 1/2° E of 51 Del. (I estimated
the mag. as 6.8) (For position, see Chart 84
of the Uranometria 2000.0 DSA). I also
observed M4 in Scorpius.

W.-Th. Mar. 8-9 03:10-03:50 UT FL: 1a S? T 4-5 (1/p; ^{gml; clouds that} left) ne; 18X5015b
ne: At first there were clouds but they left and
later were not a problem. The gibbous moon was
about 15° W. of the zenith. ^{Saturn} ~~Mars~~ was about
5° or so E. of the zenith. Aldebaran and Mars
were about 6° to 8° apart in the W. Orion
was in the SSW.

18X5015b: M42 and some areas of Orion, M41,
M46 seen faintly and M47, NGC 2244,
Plaskett's Star, 'Christmas Tree' asterism
and S Mon, M44 and Saturn, Pleiades in the
W almost "within a tree" across the street,
Hyades, Mars, R Leonis and nearby area.

5:28-5:48 a.m. EST
M 10:28-10:48 UT FL: outside lanai twl; some cloud ne; 18X5015b
ne: At the beginning of astronomical twilight
and with some moving clouds in the E. sky,

At the beginning of astronomical twilight
and with some moving clouds in the E. sky
M 1918 - 10:48 UT E: outside lawn; but somewhat ne. horizon
2:52 - 2:54 UT E: 22.5 N. 22.5 W.

Mark Klaus and nearby area
W. almost "within a tree" across the street,
and 2 M. M. W. and Saturn. Planets in the
Markoff: Star Christmas tree a distance
M 1920: faintly and M 17 M 2234
M 1921: M 17 and some areas of Orion, M 17,
was in the SW.

were about 6° to 8° apart in the W. Orion
2° or so E. of the south horizon and Mars
about 7° W. of the zenith. ^{saturn} Mars about
later were not a problem. The other moon was
no. At first there were clouds but they letland
W. 17 Mar 8-9 03:10-03:20 UT E: 10 27.4 27.4 W. (left) M 1920
one cloud that

observed M 17 in Scapins.
of the Perseus in 2000.0 DA. I also
the way as (8-9) for position see Chart 847
to the star 7° E of 51 Del. (E estimated)
of seeing a faint tail extending upward 1/4
the way to be 6.8. I was almost certain
degrees ENE of Kappa Del. I estimated

(P)
C/2000 A1
(Chojnarski)
C/2000 A1
C/2000 A1

R.A. 20h 45m. Dec: +40°45' - about 1/2
C/2000 A1 (Chojnarski) which was not about
bright stars of Delphinus, the comet
which I estimated to be about 8.5; M 17,
at stars including 2 star Y 001, R 200h
probable glimpse of the star itself, the trough
extension area of Barnard's Star with
800h, 1000h, 800h, "Taurus footprints"
182013h: Venus; Jupiter and 3 of its moons; other

(Mag. 8.5)
R 200h
C/2000 A1

2006

I observed the Summer Triangle in the NE, brilliant Venus in the E, Jupiter very high in the SE, and a number of other bright stars.

18X50LSb: Venus with its crescent; Jupiter; α Her, α Oph, IC4665 and β Oph, γ Oph, the area of Barnard's Star, the "Taurus Pontowski" asterism, the triangle of stars containing δ Ser, γ Oph, the nova RS Oph which I estimated at mag. 8.7; the bright stars of Delphinus; the comet C/2006 A1 (Pojmanski) which was at about R.A.: 20h 48.6m; Dec.: +13° 18' - about 2° SE of the star δ Del. I estimated the mag. to be 6.9. With only mediocre transparency, there was only a slight hint of a tail, if any, going upward. (For the position, see Chart 84 of The Uranometria 2000.0 D.S.A.)

RS Oph
(mag. 8.7)

Comet
C/2006 A1
(Pojmanski)
(10)

T-F. Mar. 9-10 04:35-04:40 UT FL: la S? T4 (1/p; gml; some cloud) ne
- With some clouds in the W and S. sky and with a partial circle around the moon, I observed some bright stars: Procyon, Sirius, Betelgeuse, and Saturn about 9° E. of the gibbous moon which was itself about 25° W. of the zenith. Earlier I had observed these stars also from downtown Naples while we were at the "Music on 3rd Avenue" event - listening to some musical groups and singers on the street.

5:20 - 5:50 a.m. EST.
M. 10:20-10:55 UT FL: outside la ai S? T1 (cloud); tul ne; 18X50LSb
ne: There were heavy clouds with breaks that gave a chance to see occasionally Venus, Jupiter and some of the stars including Vega and Altair

18X50LSb: I observed Venus, ϵ Lyrae, the

2000

I observed the Summer Triangle, the MC brilliant
Venus in the E. Jupiter very high in the SE, and
a number of other bright stars.

182015b: Venus with its crescent; Jupiter after

W. Op. 10.45.2 and 8. Op. 7. Op. the area
of Bura's star, the "Taurus Portonaki"

afternoon, the triangle of stars containing
2. Op. 10.45.2, the more R2 Op. which I estimated

at mag. 2.5. The bright stars of the
const. (class A1) (Portonaki) which was at about

R.A. 20h 45m; Dec. +13° 18' - about 2° SE of the
star 2. Op. I estimated the mag. to be 2.9. With

only moderate transparency there was only a slight
hint of a tail, if any, going upward. For the

position, see Chart 8 of the Uranometria 2000.
D.2.A)

R2 Op. 10.45.2
(mag. 2.5)

Const. class A1
(Portonaki)
(10)

7.4. Mar. 9-10 or 32-04: 2015b: 2015b (10.45.2; same cloud) as

- With some clouds in the W and S sky and with a
partial circle around the moon, I observed some

bright stars: Procyon, Sirius, Betelgeuse, and
Antares about 10° E. of the gibbous moon

which was itself about 25° W. of the zenith.
Further I had observed these stars also from

downtown nights while ~~was~~ were at the
"Music on 3rd Avenue" event - later on to some

musical groups and singers on the street.
2:30 - 2:55 P.M. Est. 2015b: 2015b (10.45.2; mag. 2.5)

10:20-10:25 P.M. Est. 2015b: 2015b (10.45.2; mag. 2.5)

no: There were many clouds with breaks that gave
a chance to see occasionally Venus, Jupiter

and some of the stars including Vega and
Altair
182015b: I observed Venus, Jupiter, the

2006

RS Oph
(mag. 8.7)

"Taurus Pontowski asterism," the triangle of stars containing δ Ser, γ Oph, and the area of the nova RS Oph. From only brief and occasional glances of the nova itself, I was able to estimate it at mag. 8.7. I did not get to see the comet nor very many of the bright stars in the area where it was to be found.

F-S. Mar. 10-11 03:10-03:50 UT FL: la S? T 3-5 (1/p; gml; n) ^{some cloud} ne; 18X50sb
ne: bright gibbous moon near the zenith, and also about 4° N. of Saturn and about 12° E. of Castor; Procyon, Sirius, bright stars of ~~Saturn~~ Orion in the SW, Aldebaran and Mars in the W. ^{and Spica} Arcturus, 18X50sb, M42 and other areas of Orion, M41, M46 seen faintly and M47, NGC 2244, Plaskett's Star, the 'Christmas Tree' asterism and S Mon, M36, Hyades, Mars, Saturn, R Leonis and area, lunar craters.

5:23-5:45 a.m. EST
M. 10:23-10:45 UT FL: outside lanai S? T 6; twl ne; 18X50sb
ne: Summer Triangle in the NE, brilliant Venus in the E, Jupiter very high in the SE.

18X50sb: Venus, Jupiter and 3 of its moons, M4, α Oph, ι 4665 and β Oph, γ Oph, the "Taurus Pontowski" asterism with nearby area of Barnard's Star and probably briefly and faintly the star itself, the triangle of stars containing δ Ser, γ Oph, RS Oph which was estimated to be at mag. 6.9; the Comet C/2006 A1 (Pojmanski) which was located at approximately R.A.: $20^h 55.9m$; Dec.: $18^\circ 08'$ (about $\frac{1}{2}^\circ$ NNE of the variable star α Oph.) The comet was estimated to be at mag. 7.0. There may have

RS Oph
(mag. 6.9)

Comet
C/2006 A1
(Pojmanski)
(11)

2006

been only a brief hint of a tail on the comet, but in the binoculars, it appeared at best only extremely faintly, if at all.

S.-S. Mar. 11-12 04:50-05:00 UT FL: la S? T5 (1/p; gml; some cloud) ne

- very bright gibbous moon near the zenith; Regulus about 8° E. of the moon, Saturn about 18° W. of the moon; Castor and Pollux very high in the W.; Capella in the WNW.; ^{the} Big Dipper very high in the N.; Arcturus and Spica well up in the Eastern sky, Betelgeuse in the SW with Rigel probably behind one of the buildings across the street.

^{5:50-5:55 a.m. E.S.T.}
M. 10:50-10:55 UT FL: outside lanai twl ne; 18X50sb

ne: Because of the fact that I overslept and did not begin observing until well after the beginning of astronomical twilight and the brightness of twilight was already very evident, I saw less than I had hoped to see. I saw the Summer Triangle in the NE and brilliant Venus in the E. and Jupiter very high in the SE.

18X50sb: I observed the stars of the "Taurus Ptolemaeus" asterism and the triangle of stars containing δ Ser and μ Oph (~~at least~~ ^{perhaps}), but it was too bright to see the ~~comet~~ nova. I also observed the bright stars of Delphinus or most of them but did not knowingly see the comet because of the brightness of the sky and possibly because of some clouds in the area. I observed brilliant Venus and also Jupiter.

twilight prevents seeing the nova and the comet.

S.-M. Mar. 12-13 03:25-03:30 UT FL: la S? T5 (1/p; gml) ne

- I observed for a short while seeing Saturn close to

been only a brief hint of a tail on the comet
but in the previous, it appeared at least only
extremely faintly if at all.

2-2 Mar. 11-12 04:25-05:30 UT (11:15-12:15 (local)) no
- Very bright alpha was near the zenith; beta
about 30° E. of the meridian, Saturn about 18° W. of
the meridian; Castor and Pollux very high in the W.;
Capella in the W. in the W. in the W. in the W.
in the N.; Arcturus and Spica well up in the
Eastern sky; Betelgeuse in the SW. with Rigel
probably behind one of the buildings across the
street.

11-12-04 10:25-11:25 UT (11:15-12:15 (local)) no
- Because of the fact that I overslept and did
not begin observing until well after the beginning of
astronomical twilight and the brightness of
twilight was already very low, I saw less
than I had hoped to see. I saw the Summer
Triangle in the NE and brilliant Venus in the
E. and Jupiter very high in the SE.

12-12-04 10:25-11:25 UT (11:15-12:15 (local)) no
- I observed the stars of the Summer
Triangle, Arcturus and the triangle of
stars containing 2 or 3 in Cap (alpha, beta, gamma)
but it was too bright to see the stars. I also
observed the bright stars of Delphinus or west
of them but did not know how to see the comet
because of the brightness of the sky and possibly
because of some clouds in the area. I observed
brilliant Venus and also Jupiter.

Twilight
prevents
seeing the
comet

2-11 Mar. 13 03:25-04:30 UT (10:25-11:30 (local)) no
- I observed for a short while seeing Saturn close to

2006

the ~~zenith~~ with the very bright gibbous moon about 25° E. of Saturn and Castor about 12° W. of Saturn. Sirius and Procyon were in the S. and the bright stars of Orion in the SW. Arcturus was in the NE and Spica in the E.

5:25 - 5:45 a.m. E.S.T.
M. 10:25 - 10:45 UT FL: outside lanai twl ne; 18X50ISB

RS Oph
(mag. 8.5??)

ne: At the beginning of astronomical twilight I observed under fairly good conditions that had a few clouds especially evident in the latter part of the session. I observed Venus and Jupiter and 3 of its moons, α Her, α Oph, IC4665, β Oph, γ Oph, area of Barnard's Star, the "Taurus Pontrowski" asterism, the triangle of stars containing δ Ser, γ Oph, RS Oph which had faded to about perhaps about 8.5 though (estimating magnitude may have been unreliable because of clouds and interference from twilight. I observed Comet C/2006 A1 (Pojmanski) at approximately RA: $21^h 04.0m$; Dec.: $+22^\circ 36'$ about $1\frac{1}{2}^\circ$ ENE of the star 33 ~~Her~~ (See Chart 65 of Uranometria 2000.0). It was at about mag. 7.2. With the slight beginnings of twilight and the possible presence of some cloud, there was only a very slight hint of a tail, if any, seen at that time.

Comet
C/2006 A1
(Pojmanski)
(mag. 7.2?)
(12)

M.-T. Mar. 13-14 03:15 - 04:05 UT FL: la s: T45 (1/p; fml; n) ^{some cloud} 18X50ISB ne; 1

ne: I observed under a very brilliant moon that was less than 24 hours from being full, and with some clouds interfering especially in the first part of the session. Bright stars of Orion were in the SW. Procyon and Sirius were in the S. Saturn was near the Zenith. Regulus was about 22°

with the very bright gibbous moon about 25°
E. of Saturn and Castor about 15° W. of
Saturn. Sirius and Procyon were in the S.
and the bright stars of Orion in the SW. Antares
was in the NE and Spica in the E.

M. 10:45-10:55 P.M. - anticlockwise full
M. 10:55-11:05 P.M. - anticlockwise full
No: At the beginning of astronomical twilight I observed
under fairly good conditions that had a faint
essentially vertical in the latter part of the
session. I observed lines and 2 water and

3 of its moons after a Cpl, 10:45-10:55 P.M.
Y0ph, area of Barnard's Star, the "Taurus"
Polaris, Castor, the triangle of stars containing
2 star Y0ph, R20ph which had faded to about
perhaps about 8.5 through estimating magnitude
may have been unreliable because of clouds and
interference from twilight. I observed
Cont. class A1 (Polaris) at approximately
R.A. 21h 04m; Dec: +33° 36', about 1 1/2° ENE

R20ph - 33
Mag. 8.5

of the star 33 Bet (See Chart 25 at
Wavelength 2000.0) It was at about mag. 7.5.
with the slight beginning of twilight and the
possible presence of some cloud, there was only
a very slight hint of a tail, it was 2 sec. at
that time.

Cont. class A1
(Polaris)
Mag. 2.1
(12)

M-T. Mar. 13-14 03:15-04:05 P.M. - anticlockwise full
No: I observed under a very brilliant moon about
was less than 24 hours from being full, and with
some clouds interfering especially in the first
part of the session. Bright stars of Orion were in
the SW. Procyon and Sirius were in the S. Saturn
was near the East. Regulus was about 25°

anticlockwise full
Mag. 10.5

2006

E. of Saturn; the moon was about 12° E of Regulus. Mars and Aldebaran were about 10° apart, low in the W. sky.

18X50sb: M41, M47, M42 and other areas of Orion, NGC2244, Plaskett's Star, the 'Christmas Tree' asterism and S Mon, M35, M36, lunar craters and features on the moon that was about 2 hours from being precisely full.

^{5:20-5:45 a.m. EST}
m. 10:20-10:45 UT FL: outside laanai tw; full ne; 18X50sb
ne: Summer Triangle in the NE; brilliant Venus in the E; Jupiter high in the SE; Full Moon up about 15° to 20° in the W.

18X50sb: Venus; Jupiter and at least 1 of its moons; α Her, α Oph, IC4665, β Oph, γ Oph, the "Taurus Pontowski" asterism, the triangle of stars containing δ Ser, γ Oph, the area of RS Oph which I examined carefully and thought that I saw the nova and probably did but was not absolutely certain. I observed the comet C/2006 A1 (Pojmanski) which was very approximately at R.A. $21^h 06m$; Dec.: $+25^\circ$. (See Chart 65 of Uranometria 2000.0 DSA.) It was probably at about mag. 7.3. Seeing any tail was difficult and I was not absolutely certain of it, with the light pollution and the Full Moon (now about 13 hours from the instant given for precise Full Moon)

- probably saw RS Oph, but not certain.

Comet
C/2006 A1
(Pojmanski)
(mag. 7.3?)
(13)

T-W Mar. 14-15 04:02-04:07 UT FL: la s? T3 (1/p; fml) ne

- After returning from a hockey game at Germaine Arena (and not seeing the Penumbral Lunar Eclipse) I observed briefly with a very bright Full Moon very high in the E. sky. Saturn was SW of the

E of Saturn; the moon was about 15° E
 of Regulus. Mars and Aldebaran were
 about 10° apart low in the W. sky.
 Observed: M4, M7, M12 and other objects of Orion.
 Observed: Pleiades Star, the "Christmas Tree"
 asterism of 2 Mar, M32, M33, Lure
 Crater and features on the moon that was
 about 2 hours from being precisely full.

The Summer Triangle in the NE; brilliant Venus in the E.
 Jupiter high in the E; Full Moon up about 15°
 to 20° in the W.

Observed: Venus, Jupiter and at least 1 of its
 moons: a Hot & Cold T Crater, W 40° N 10° E
 the "Taurus footprints" asterism, the triangle of
 stars containing Betelgeuse, the area of R 136A
 which I examined carefully and thought that
 I saw the new and gibbous but not
 not absolutely certain I observed the new
 C/2004 A1 (Lincicovich) which was very
 approximately at RA 21.5°; Dec. +35°. (See
 last page of observations 3000-3005) (It was
 probably at about mag. 7.3. Seeing only fair was
 difficult and I was not absolutely certain of it
 with the light pollution and the Full Moon
 (now about 13 hrs from the instant given for
 precise Full Moon)

- probably seen
 R 136A, but
 not certain

Const A1
 C/2004 A1
 (Lincicovich)
 mag. 7.3
 (13)

The Mar. 14-15 04:00-05:00 UT (10:20-11:00 AM) no
 - After returning from a backyard game of bocce ball
 Area (and not seeing the Pleiades, Lure, etc.)
 I observed briefly with a very bright Full Moon
 very high in the E. sky. Saturn was SW of the

2006

zenith, and Sirius and Procyon were in the S. Betelgeuse and Bellatrix were seen in the SW. Capella was in the WNW. Arcturus was in the NE and Spica in the E.

5:07 - 5:37 a.m. E.S.T.
M. 10:07 - 10:37 UT FL: outside lanai S? T4 (1/p; cloud); tel ne; 18x5015b

ne: I tried to observe in spite of the clouds which allowed periodic views of some objects. Venus was seen on occasion in the E. I saw Jupiter very high in the SE. The Full Moon could be discerned ~~and~~ or through the clouds about 25° above the W. horizon. In the NE Vega and Altair could also be seen at times.

18x5015b: I observed Venus, Jupiter, ϵ Lyrae, the bright stars of Delphinus, the "Taurus Pontowski" asterism in Ophiuchus and the triangle of stars containing δ Ser, but I did not really have time to take a good view of the ~~comet~~ nova. Also I did not knowingly see the comet, though I saw some stars in Delphinus

- Clouded out from seeing the nova and the comet.

W.-Th. Mar. 15-16 02:45-03:20 UT S? T4-5 (1/p; gml; some haze) ne; 18x5015b

ne: Saturn near the zenith, very bright moon only about 1 day after Full Moon ~~well~~ up in the E, Orion in the SW, Aldebaran and Mars in the W, Sirius and Procyon in the S, Arcturus in the NE and Spica in the E.

18x5015b: M42 and other areas of Orion, M41, M47, NGC 2244, Plaskett's Star, "Christmas Tree" asterism and S Mon, M35, M36, Hyades and Mars, R Leonis and area, M44 and Saturn nearby.

5:11 - 5:40 a.m. E.S.T.
M. 10:11 - 10:40 UT FL: outside lanai S? T5 (1/p; gml) ne; 18x5015b

ne: brilliant Venus in the E, Jupiter very high in the SE, the very bright gibbous moon about 30° above the SE horizon, the Summer Triangle in the NE.

Repeated in Log # 26

W.M. 10:07-10:37 UT
2:07-2:37 A.M. T
18x2015p
W.M. Antares was in the NE and Spica in the E.
and Pollux were seen in the S.W. Capella was in the
South and Arcturus was in the NE. Betelgeuse

re: I tried to observe in spite of the clouds which allowed
poor views of some objects. Venus was
seen on occasion in the E. I saw Jupiter
very high in the SE. The Full Moon could be
discerned just at through the clouds about

25° above the W. horizon. In the NE Vega
and Altair could also be seen at times.

18x2015p: I observed Venus, Jupiter, Epsilon,
the bright stars of Delphinus, the "Taurus"
asterism in Orion and the triangle
of stars containing β Cep, but I did not
really have time to take good views of the
const. Also I did not knowingly see the
const, though I saw some stars in Delphinus

Clashed out
from seeing
the stars and
the const.

W-Tu Mar 12-10 08:45-09:30 UT 2:14-2:19 AM; somewhat
re: Saturn near the zenith, very bright moon and about
day after Full Moon

the SW, Altair and Mars in the W. Spica and
Procyon in the S. Antares in the NE and Spica
in the E.

18x2015p: Mars and other stars of Orion, M41, M42,
M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100, M101, M102, M103, M104, M105, M106, M107, M108, M109, M110, M111, M112, M113, M114, M115, M116, M117, M118, M119, M120, M121, M122, M123, M124, M125, M126, M127, M128, M129, M130, M131, M132, M133, M134, M135, M136, M137, M138, M139, M140, M141, M142, M143, M144, M145, M146, M147, M148, M149, M150, M151, M152, M153, M154, M155, M156, M157, M158, M159, M160, M161, M162, M163, M164, M165, M166, M167, M168, M169, M170, M171, M172, M173, M174, M175, M176, M177, M178, M179, M180, M181, M182, M183, M184, M185, M186, M187, M188, M189, M190, M191, M192, M193, M194, M195, M196, M197, M198, M199, M200, M201, M202, M203, M204, M205, M206, M207, M208, M209, M210, M211, M212, M213, M214, M215, M216, M217, M218, M219, M220, M221, M222, M223, M224, M225, M226, M227, M228, M229, M230, M231, M232, M233, M234, M235, M236, M237, M238, M239, M240, M241, M242, M243, M244, M245, M246, M247, M248, M249, M250, M251, M252, M253, M254, M255, M256, M257, M258, M259, M260, M261, M262, M263, M264, M265, M266, M267, M268, M269, M270, M271, M272, M273, M274, M275, M276, M277, M278, M279, M280, M281, M282, M283, M284, M285, M286, M287, M288, M289, M290, M291, M292, M293, M294, M295, M296, M297, M298, M299, M300, M301, M302, M303, M304, M305, M306, M307, M308, M309, M310, M311, M312, M313, M314, M315, M316, M317, M318, M319, M320, M321, M322, M323, M324, M325, M326, M327, M328, M329, M330, M331, M332, M333, M334, M335, M336, M337, M338, M339, M340, M341, M342, M343, M344, M345, M346, M347, M348, M349, M350, M351, M352, M353, M354, M355, M356, M357, M358, M359, M360, M361, M362, M363, M364, M365, M366, M367, M368, M369, M370, M371, M372, M373, M374, M375, M376, M377, M378, M379, M380, M381, M382, M383, M384, M385, M386, M387, M388, M389, M390, M391, M392, M393, M394, M395, M396, M397, M398, M399, M400, M401, M402, M403, M404, M405, M406, M407, M408, M409, M410, M411, M412, M413, M414, M415, M416, M417, M418, M419, M420, M421, M422, M423, M424, M425, M426, M427, M428, M429, M430, M431, M432, M433, M434, M435, M436, M437, M438, M439, M440, M441, M442, M443, M444, M445, M446, M447, M448, M449, M450, M451, M452, M453, M454, M455, M456, M457, M458, M459, M460, M461, M462, M463, M464, M465, M466, M467, M468, M469, M470, M471, M472, M473, M474, M475, M476, M477, M478, M479, M480, M481, M482, M483, M484, M485, M486, M487, M488, M489, M490, M491, M492, M493, M494, M495, M496, M497, M498, M499, M500, M501, M502, M503, M504, M505, M506, M507, M508, M509, M510, M511, M512, M513, M514, M515, M516, M517, M518, M519, M520, M521, M522, M523, M524, M525, M526, M527, M528, M529, M530, M531, M532, M533, M534, M535, M536, M537, M538, M539, M540, M541, M542, M543, M544, M545, M546, M547, M548, M549, M550, 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Relative Sunspot Numbers

Date: My
2005 Observation.

2404 - Aug. 22 54

23 52

24 29

25 64

26 49

27 58

2410 - 28 54

29 54

Sept. 1 11

2 16

3 11

4 12

6 12

7 11

9 47

10 55

11 62

2410 - 12 56

13 88

14 78

15 40

18 44

21 19

23 16

24 14

27 14

28 23

30 0

Oct. 1 0

2 0

3 0

4 25

5 26

6 19

Oct. 21 0

30 0

2440 - Nov. 2 0

7 0

11 0

14 32

23 29

25 12

