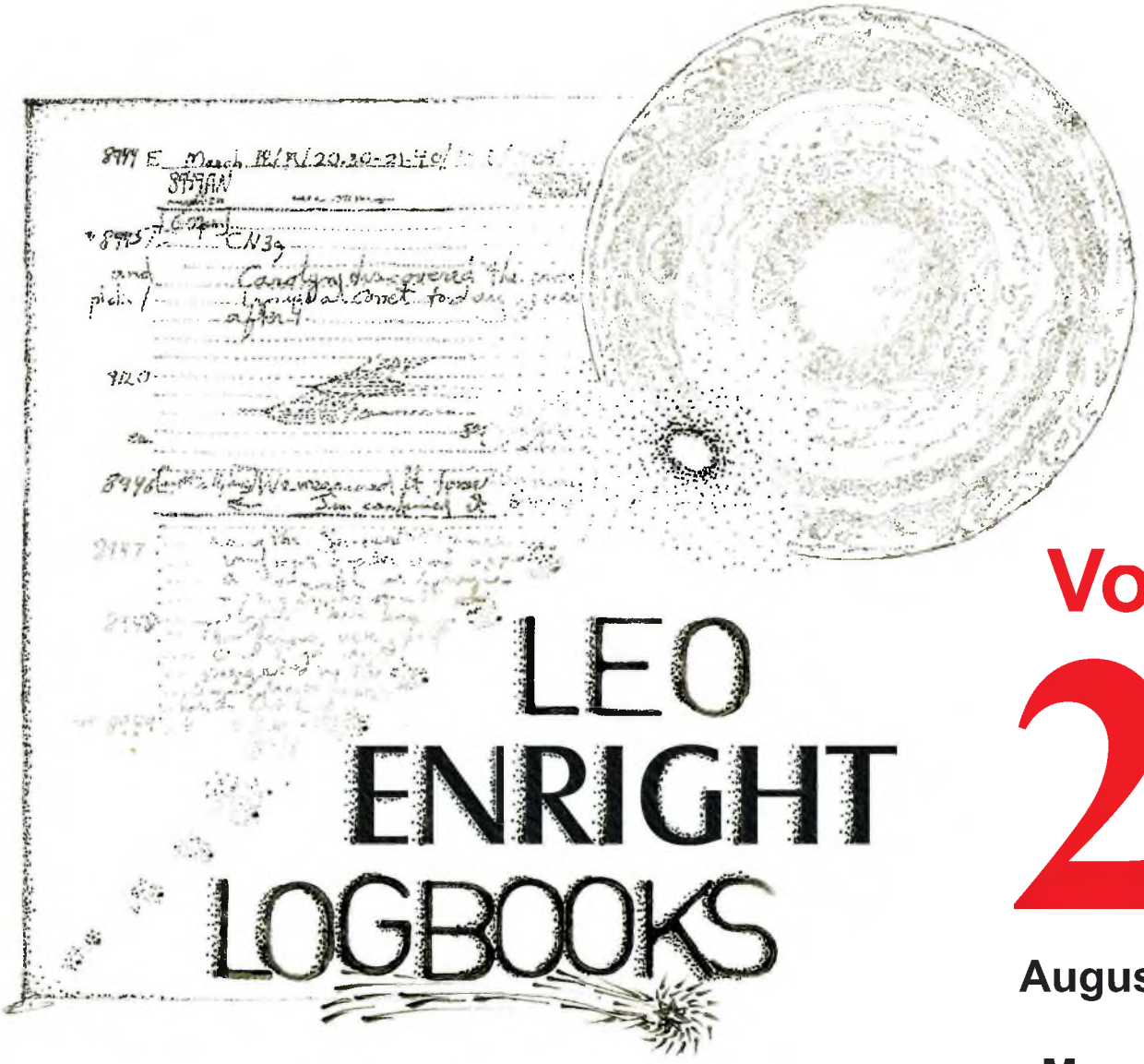

LEO ENRIGHT LOGBOOKS

Volume 25

August 22, 2005
to
March 15, 2006

25

Hilroy

Leo Enright
Observing Log

Aug. 22, 2005 – Mar. 15, 2006

140 Pages

26.7 x 20.3 cm

1 SUBJECT NOTEBOOK
CAHIER 1 SUJET

MADE IN CANADA
FABRIQUÉ AU CANADA ™

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AAVSO
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2005

May. 2004

- C⊕ - May 7: 0.32 AU
- perihelion May 15 0.96 AU
10 A.U. : mag. 20

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

- near M44 on May 14 and 15.

- near

Sat
5
407
12
414
19
421

- near δ
- peak
- May 6 - near
getting
- May 15 - near
- until May 22
- until September

C/2002 T7 (LIN
- perihe
- C⊕: d

Pulsating

δ Cep:

5.36... ε - 4.2
3.5-4.4 δ 3.6

Slides

109-3
-103.3-4.
-10
-103
-104
-105
-107
-108
-112
108-

Eclipsing

β Lyrae:

12.96...

0
1
1.5
2

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

Since last meeting on Feb. 10

Observations: 44 (19 pages of 7 Sketches)
late evening: 21 (6)
early morning: 23 (4)

Mars Aries → Pleiades - Ald 7°
- 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:

00 = 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 extremely 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 32cm 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

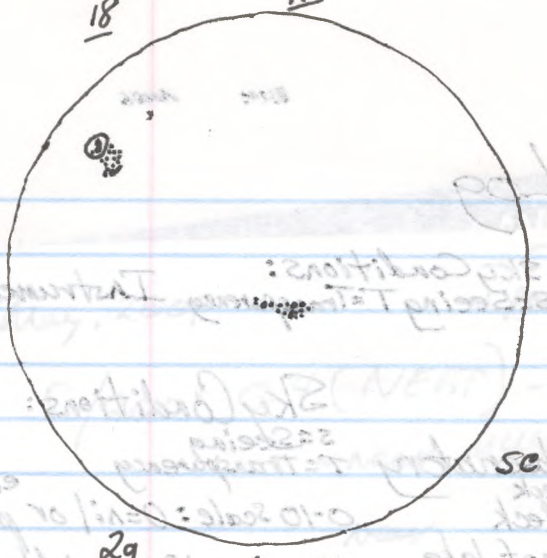
Objects:

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
U210 = Uranometria 2000.0 Chart 210
AAVSO = AAVSO Variable Star Atlas
Cam = Cambridge Star Atlas (2000)
MSA = Millennium Star Atlas.

18 16

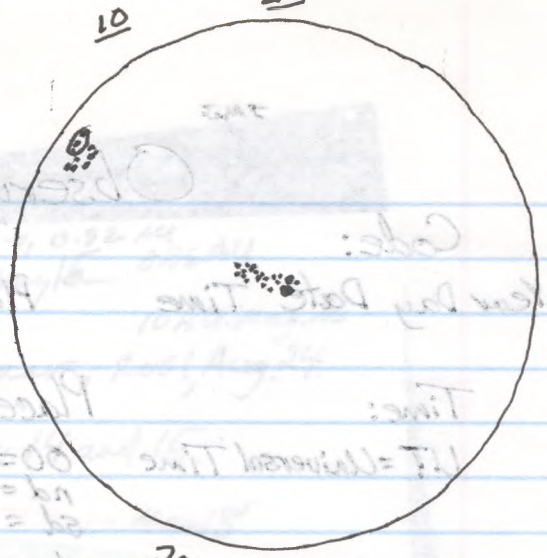


SC

2g
345
RSN64

Aug. 22
16:05-16:10 UT

10 22

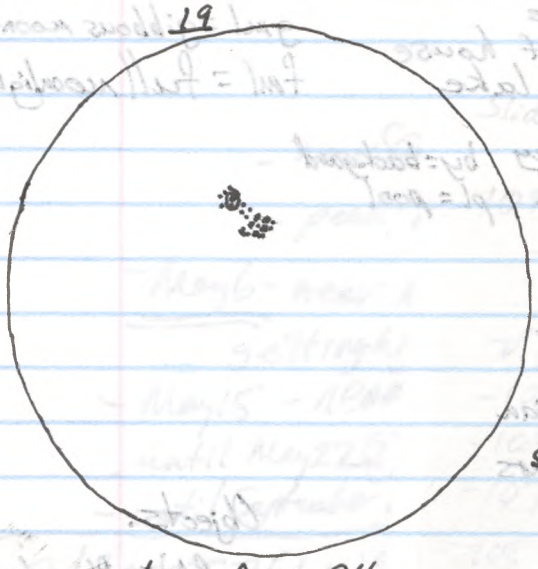


SC

2g
32s
RSN52

Aug. 23
14:45-14:50 UT

19



SC

tg
19s
RSN29

Aug. 24
15:05-15:10 UT

2005 Su. Aug. 21 15:00-15:10 UT nd PST, 20, 19, 17, 15.5, 15, n
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.

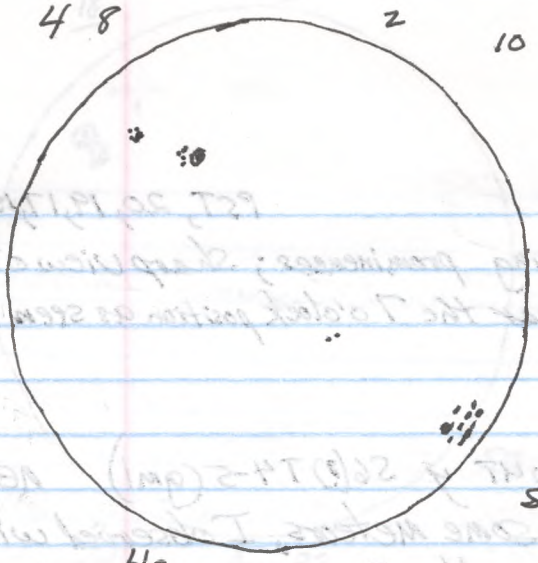
M. Aug. 22: 16:05-16:10 UT t C-8, 32
sun 2g 34s RSN54 T.O.F.

M.-T. Aug. 22-23 02:20-03:20 UT y+nd S9(?) T6-7 (gml) ne; 18x50 lb
ne: bright stars of summer; one meteor in Pegasus.
18x50 lb: M11 and R Scuti, M16, M17, M18, M8, M20, M21, M22, area of Neptune in Cap.; possibly area of Uranus in Aquarius; Kemble's Cascade, Kemble 2; Barnard's Star and area, IC 4665, R CorBor, T CorBor., M13, M92

T. Aug. 23 14:45-14:50 UT t C-8, 32
sun 2g 32s RSN52 T.O.F.

W. Aug. 24 15:05-15:10 UT t C-8, 32
sun 1g 19s RSN29 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 33.3 X.



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

2005 W-Th. Aug. 24-25 02:05-03:05UT nd+y S8(?)T 9.5-7∧ (aftermoonrise) ne; 18x50 15b

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.

Some Aurora

18x50 15b: 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.

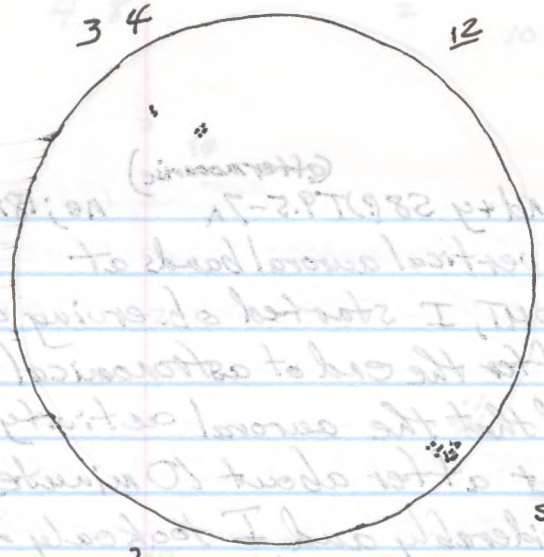
Th. Aug. 25 16:10-16:15 UT t C-8, 32
sun 4g 24s RSN64 T.O.F.

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

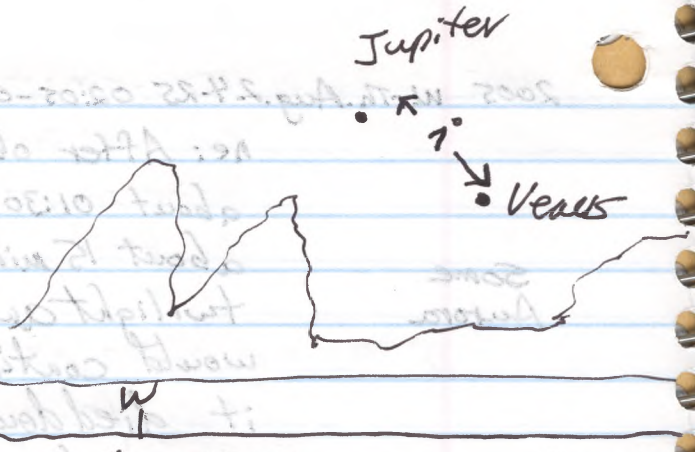
Th.-F. Aug. 25-26 00:20-01:30 UT on dock∧ twl ne (at John Vandesande's place)

- Hoping to observe Jupiter and Venus low in the W. and about 7° apart, I went to John Vandesandes 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



3g Aug. 26
19s 15:25-15:30 UT
RBN49



2005, Aug. 26-27, 00:30 UT - View to W. showing Jupiter and Venus, about 36 min 5 min after,

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 5 4 (poor) T 5 (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 C-8, 32
Sun 3g 19s RSN 49 T.O.F.

F. Aug. 26 15:40-15:45 UT nd P.S.T., 20, 19, 15.5, 12.
Sun - did not see any large, obvious prominences.

F.-S. Aug. 26-27 00:20-00:50 UT, John Vandesande's dock twl 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.)

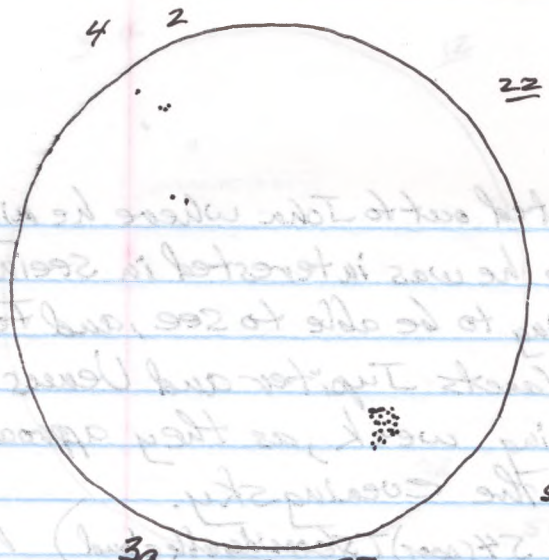
Jupiter and Venus!

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

02:55-04:20 UT y 5 8 T 9-9.5 (at 03:19 UT before moonrise) ne; 18x50 I 56

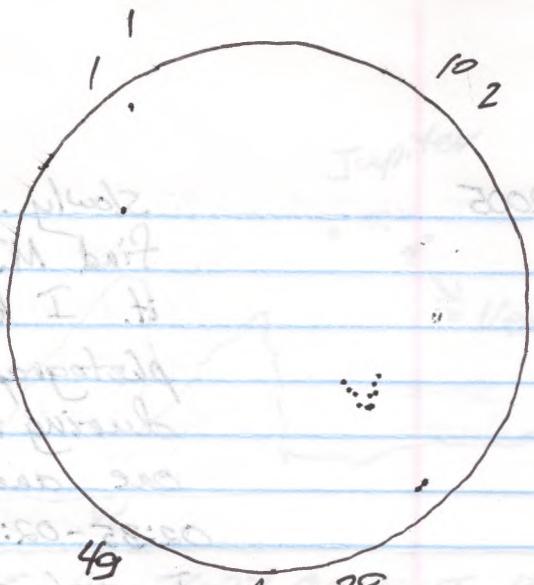
ne: stars of summer; one nice meteor.

18x50 I 56: M11 and R Scuti, Uranus and area, Neptune



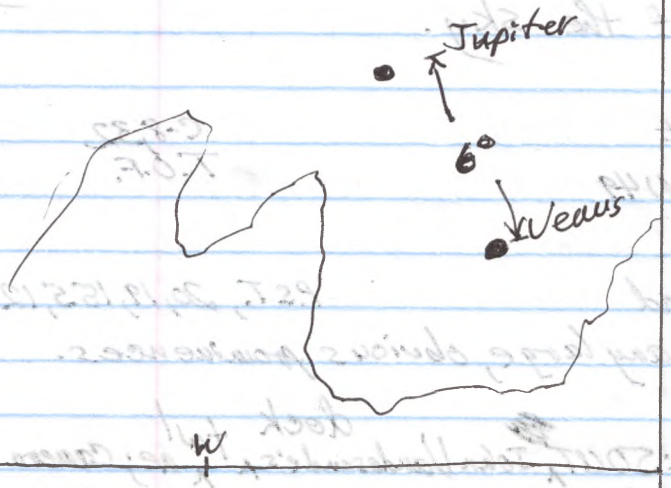
3g
28s
RGN58

Aug. 27
15:25-15:30 UT



4g
14s
RGN54

Aug. 28
16:35-16:40 UT



2005, Aug. 28-20, 00:30 UT View to W. from John Vandesande's dock

2005

and area, M16, M17, M18, M24, M25, M22, M2, M15, Barnard's Star and area, IC4665, M13, M92, TCorBor and area, Kemble's Cascade, Kemble 2, Double Cluster and Stock 2 M31 and area, M33, NGC7789, M71, M27, βCyg.

Sa. Aug. 27 15:25-15:30 UT t C-8, 32
sun 3g 28s RSN58 T.O.F

Sa. Aug. 27 15:40-15:45 UT nd P.S.T., 20, 19, 12, 8
sun - did not see any major prominences

Su. Aug. 28 16:35-16:40 UT C-8, 32
sun 4g 14s RSN54 T.O.F.

Su. Aug. 28 16:50-16:55 UT nd P.S.T., 20, 19, 12, 8.
sun - did not see any major prominences.

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

ne: During twilight, I again went to John Vandesande's dock to observe and photograph Jupiter and Venus which were now about 6° apart. The sky was generally quite clear. Venus went behind a tree at about 00:46 UT (see diagram)

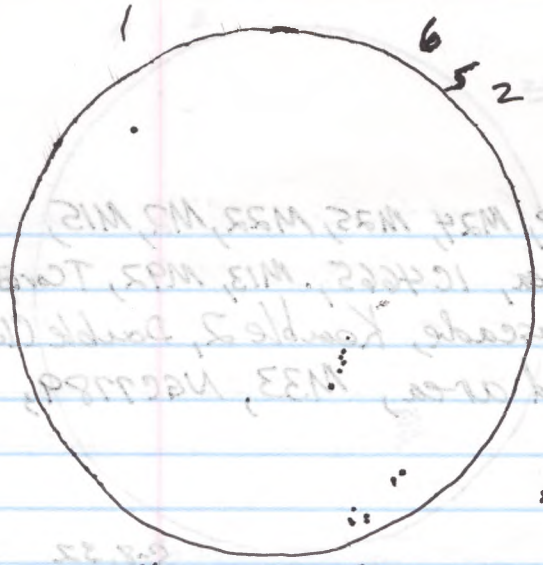
Jupiter and Venus!

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(?)T8-9 ne; 18X50156

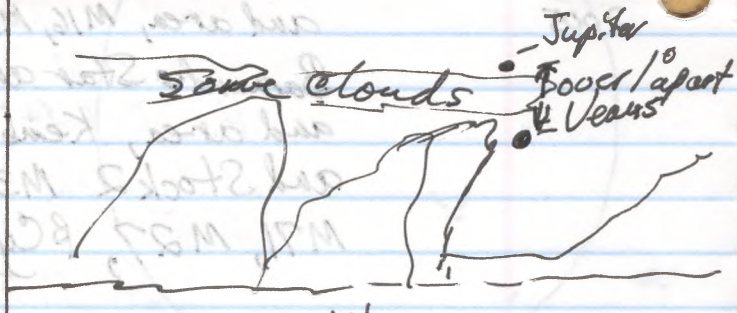
ne: stars of summer; bright stars gleaming through the trees in the E. near the end of the session

18X50156: area of Uranus in Aquarius, area of Neptune in Capricornus, M11 and RScuti, M23, M24, M25, M8, M16, M17, M18, M31, M32,

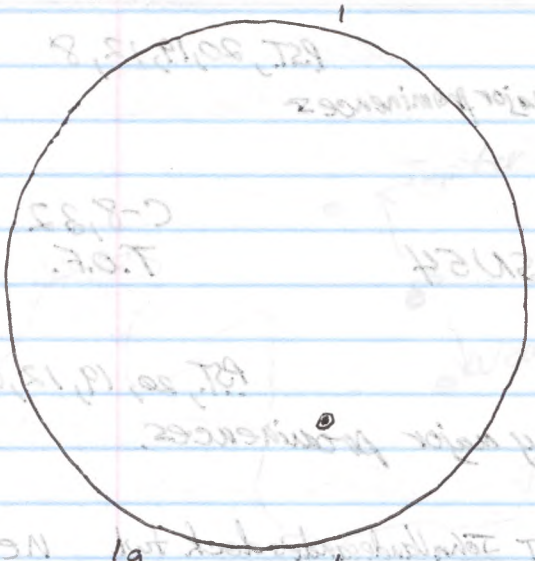


4g
14S
RSN54

Aug. 29
16:40-16:45 UT



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



1g
1S
RSN11

Sept. 1
15:40-15:45 UT

2005.

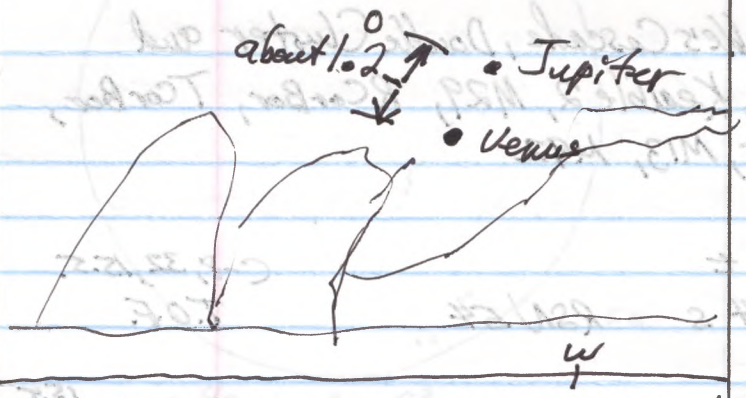
M 110, M33, Kemble's Cascade, Double Cluster and Stock 2, M29, Kemble 2, M29, R Cor Bor, T Cor Bor, ~~Barnards~~ Star, M13, M92

M. Aug. 29 16:40-16:45 UT t C-8, 32, 15.5.
sun 4g 14s RSN 54 T.O.F.

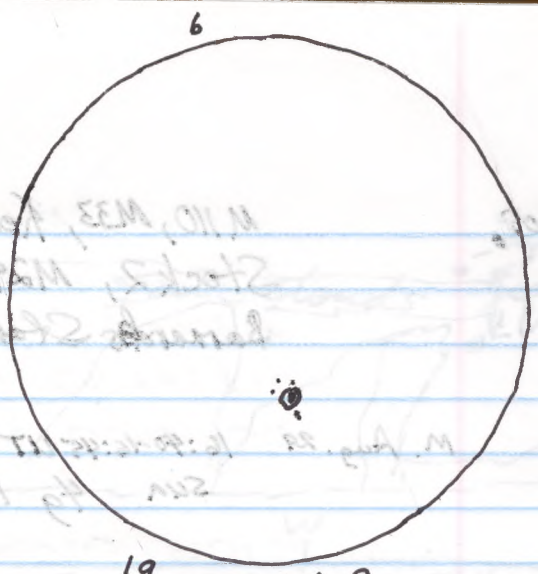
M. Aug. 29 16:55-17:05 UT nd P.S.T., 20, 32, 28, 20*, 15.5
- sun - no obvious prominences seen (* - made Erfle eyepiece)

W.-Th. Aug. 31-Sept. 1 00:05-00:45 UT John Vandesandesdock 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 135 mm lens.
02:00-05:30 UT nd & 00 58(?) T 7-9 (varied) ne; 18X50156
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
18X50156: M11 and R Scuti, M27, M57, M13, M92, Barnard's Star, Double Cluster and Stock 2, Kemble 2, M2, M15, R Cor Bor, T Cor Bor, Uranus area, Neptune area.
ph.: photographed various areas of the sky, using the 200 mm f/2.8 lens.

Th. Sept. 1 15:40-15:45 UT t C-8, 32, 20, 19, 17, 16.5
sun 1g 1s RSN 11 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

2005 Th Sept. 1 15:55-16:00 UT nd P.S.T. 20, 32, 20*, 19, 17

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

Th.-F. Sept. 1-2 00:05-00:45 UT John Vandescarde'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 135 mm 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 S8(?) T9-9.5 (except when cloudy) ne; 18x50 lsb

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 ½ 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.

18x50 lsb: M11 and R Scuti; areas of the Milky Way, M31 area, M33 area, Uranus area in Aquarius.

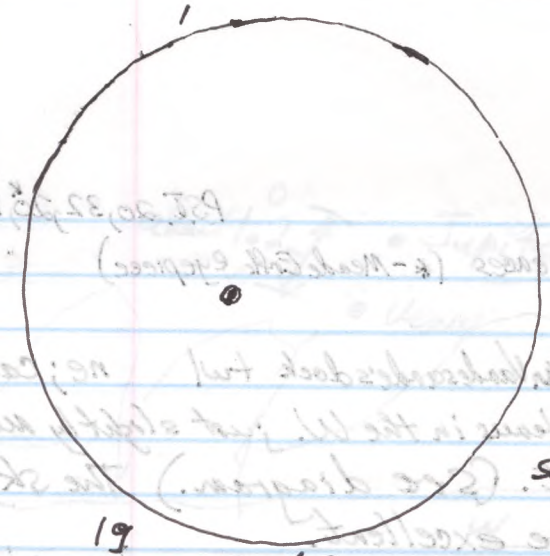
ph.: photographed various objects using the 200mm and the 135 mm lenses.

F. Sept. 2. 15:45-15:50 UT t C-8, 32, 28, 20.

Sun lg 6s RSN16 T.O.F.

F. Sept. 2 16:00-16:05 UT nd P.S.T. 20, 15.5

Sun - no obvious prominences seen



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

From U254: 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 71 Aquilae.
6965	14.0	
6967	13.1	⊙

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

NGC 2000.0 ⊙ p.218

From U258: group of 11 galaxies

7506	mag. 12.4	(12, 16. 7506 is included)
7517	14.4	(*) ⊙ - in Pisces
7521	13.9	⊙ E of η 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 dock twl ne; camera

ne.: Jupiter and Venus in the W. about 1.5° apart. There was some cloud in the ~~er~~ 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. 12½"

01:30-07:00 UT Y s8(?) T7-9 (varied) ne; 20x100b; Ken's

ne: I had a long observing session with Ken Kingdon in the yard. He set up his 12½" 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 CorBor, R CorBor, M2; looked for a comet that Ken suggested might be visible in the NW sky, but was not sure of seeing it.

Ken's 12½": A group of 7 galaxies NE of 71 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,

2

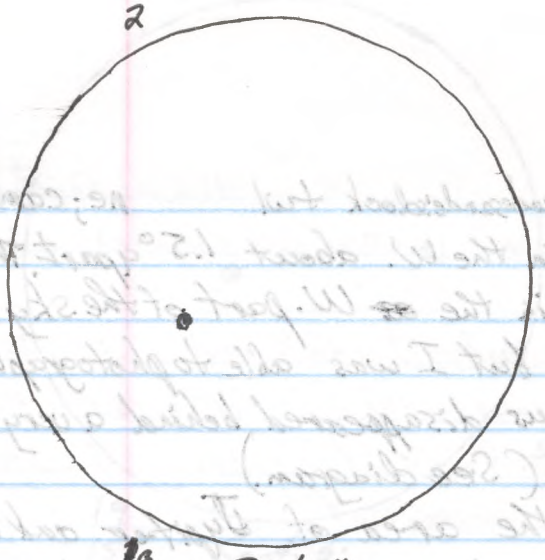


Fig 28 Sept. 4
RSN12 15:10-15:15 UT

2005

and Mars; M1; Pleiades, NGC 7789.

Sa Sept. 3 15:45-15:50 UT t C-8, 32, 20, 15.5 T.O.F.
sun lg 1s RSN11

Sa. Sept. 3 16:00-16:05 UT nd P.S.T., 20, 20E*, 15.5
sun - no large, obvious prominences noticed. (*= Meade Erfle eyepiece)

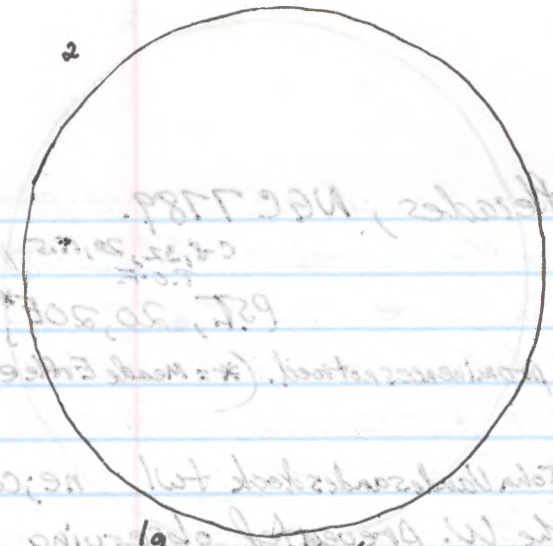
Sa.-Su. Sept. 3-4 00:00-00:35 UT John Vandesandesdock twl ne; camera
ne: Clouds low in the W. prevented observing Jupiter and Venus. However, during the twilight I observed Arcturus and some of the bright stars of the Big Dipper.

Su. Sept. 4 15:10-15:15 UT t C-8, 32, 28, 20 T.O.F.
sun lg 2s RSN12

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 "Nirvana"-Irvine Lake Airstrip twl; 5-8-9T-9.5! 25" 18x50 bino 20x80 bino; ne;
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 Moosehorn Restaurant on Highway 41 about 2km. 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 Atillo Danko who brought his huge 25" telescope. I observed in twilight (and photographed) Venus and

2



SC

19
25
RSN12

Sept. 6
16:15-16:20UT

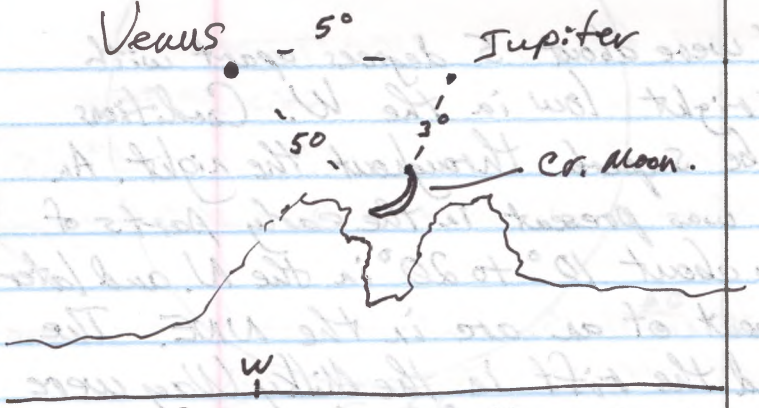
2005

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 Aurora 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 Atillo 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 hairdryer 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.

18x50b: I observed about 30 Messier objects: M11, M26, M 22, 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, M2.

25": In Atilla Danko's huge 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.

2005

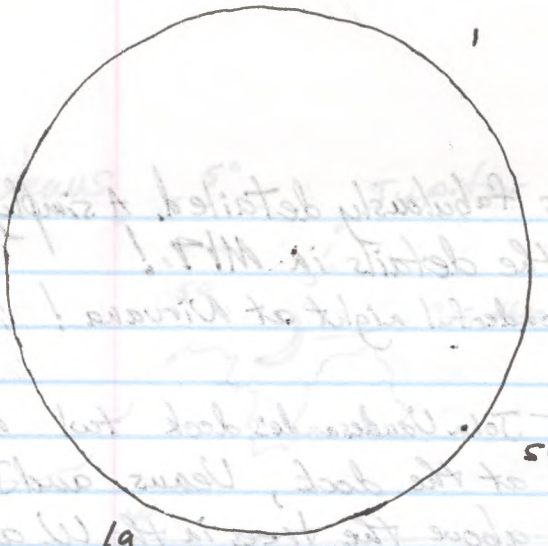
M17 which was fabulously detailed. A simply superb view of the details in M17!
Overall, it was a wonderful night at Nirvana!

M.-T. Sept. 5-6 00:30-00:35 UT John Vandesande's 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 s8(?) T9-9.5! ne; 18x50sb
ne: stars of summer under excellent skies, Mars very bright in the E.
18x50 sb: M11 and R Scuti, M33, Uranus area, Neptune area.

Tu. Sept. 6 16:15-16:20 UT t C-8, 32, 28, 20, 15.5
Sun lg 2s RSN 12 (See previous page for diagram) T.O.F.

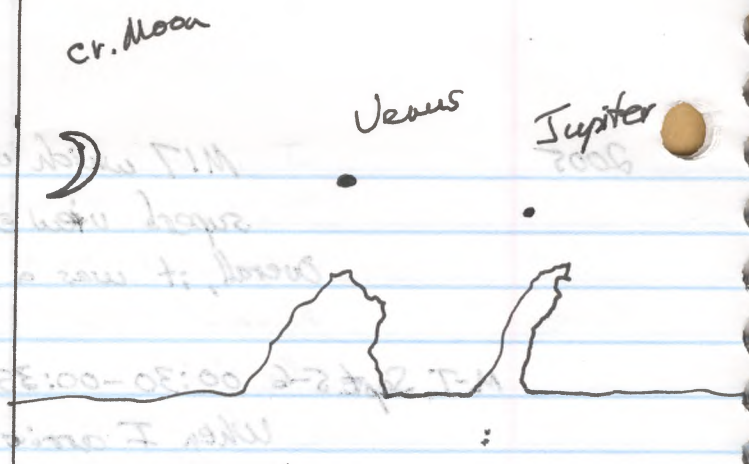
Tu. Sept. 6 16:30-16:35 UT nd P.S.T., 20, 20E*, 15.5
Sun - no obvious prominences seen (*E=Erfle)

T.-W. Sept. 6-7 23:55-00:25 UT John Vandesande's 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 135 mm lens.



lg
15
RSN11

Sept. 7
16:45-15:60UT



2005, Sept. 7-8 – 00:10 UT
View to W. showing Cr. Moon, Venus, and Jupiter.

2005

02:50-05:00UT 00 S8(?)T8.5-9.5(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, Kembles Cascade, Keable 2, Double Cluster and Stock 2, D Dra - DS - split beautifully.

W. Sept. 7 15:45-15:50UT t C-8, 32
sun lg ls RSN11 T.O.F.

W. Sept. 7 16:05-16:10 UT ad P.S.T., 20, 20E, 15.5
sun - no large, obvious prominences seen.

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

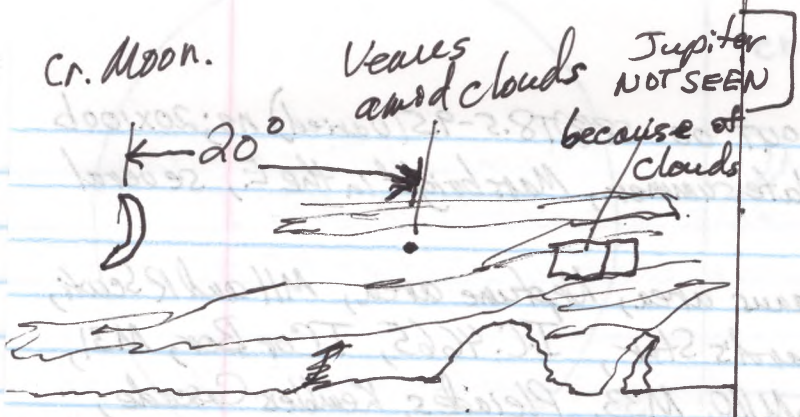
- I observed the Crescent Moon and Venus at first, and then beginning at about 00:07 or so, Jupiter became visible. The objects were about evenly spaced low in the W. sky. (See diagram.)

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+ad S7(7)T6-7(some haze) ne; 18x50ISb

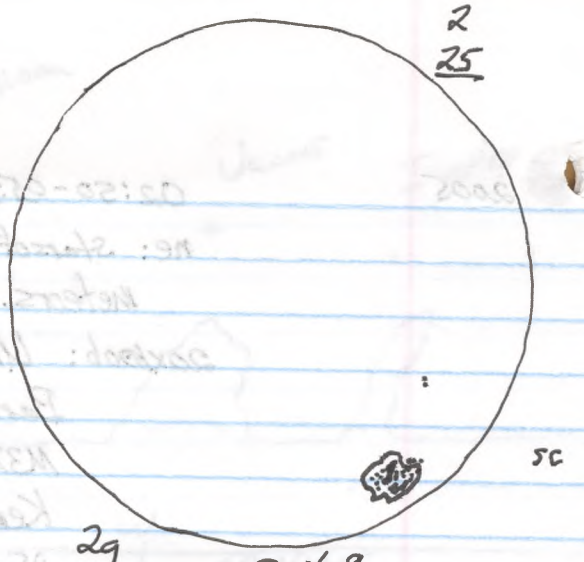
ne: stars of late summer, Mars among the trees in the E., at least one nice meteor

18x50ISb: area of Uranus, area of Neptune, M11 and R Scuti, M26, M13, M92, IC4665, Barnard's Star, Col 299, M71, M27, M57, 4 and E4 Del, M2, M15, M31, M32, M110, M33, Double Cluster and Stock 2, NGC7789



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

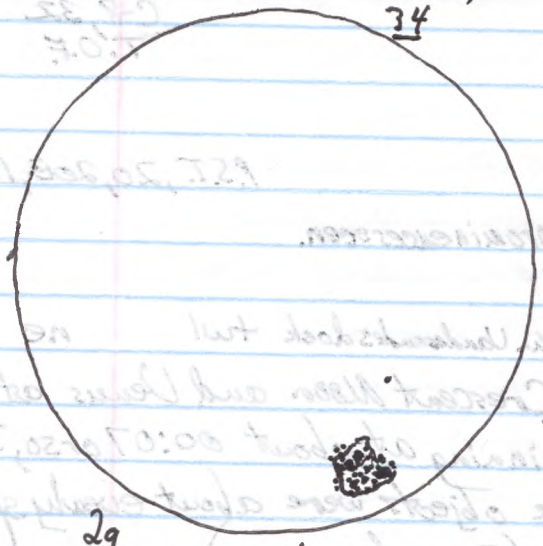
2
25



2g
27s
RSN 47

Sept. 9
16:25-16:30 UT

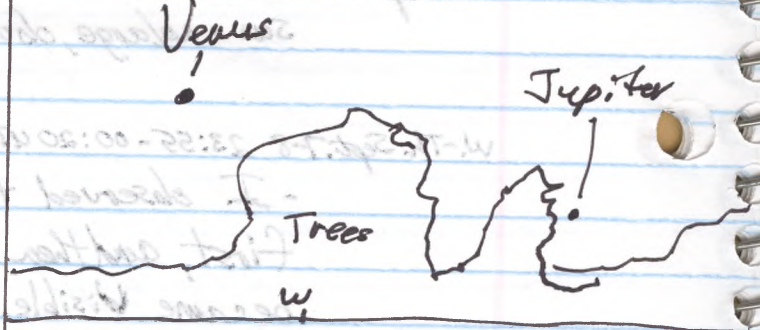
34



2g
35s
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 Venus and Jupiter and the area of the moon.

03:45-03:55 UT nd+y 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 C-8, 32
sun 2g 27s RSN 47 T.O.F.

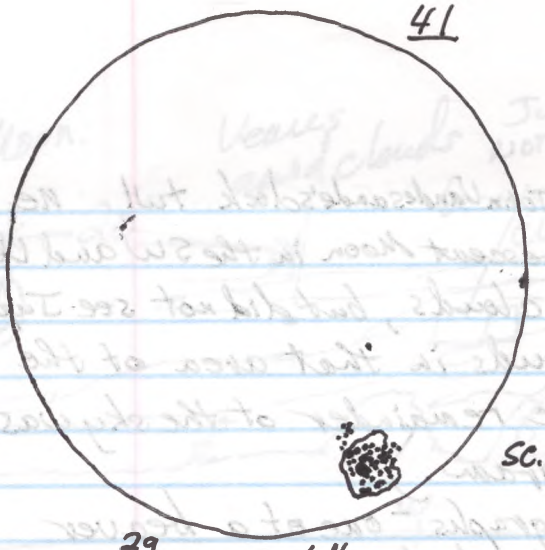
W. Sept. 9 16:45-16:50 UT nd P.S.T., 20, 20E, 15.5
sun - no large, obvious prominences seen, but the large sunspot group that had just rotated onto the near side was very obvious and fairly detailed.

Sa. Sept. 10 14:40-14:45 UT C-8, 32
sun 2g 35s RSN 55 T.O.F.

Sa.-Su. Sept. 9-10 01:00-03:00 UT at Queen's University roof of Ellis Hall ^ S8(?)T4-5 (Vp; fg ml) 20x100b ne; ^

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'



29
425 Sept. 11
KSNV62 16:50-16:55UT

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 Roadey, 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 χ Persei Cluster.

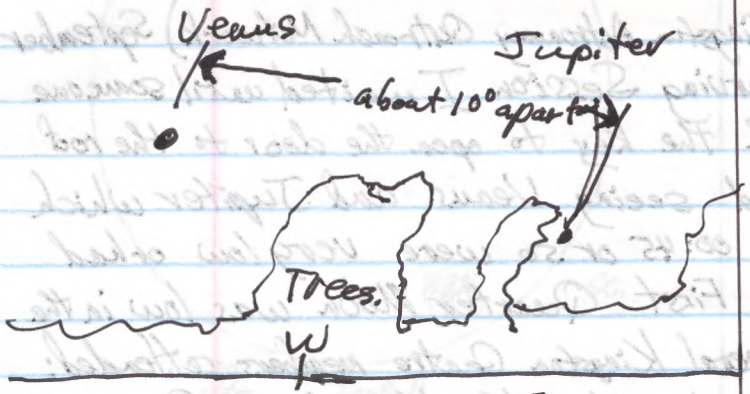
Su. Sept. 11 16:50-16:55 UT t C=8,32
Sun 2g 92s ASN 62 T.O.F.

Su. Sept. 11 17:25-17:30 UT nd P.S.T., 20, 20E, 155
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 S8?ITC-7 (Aurora) 1e

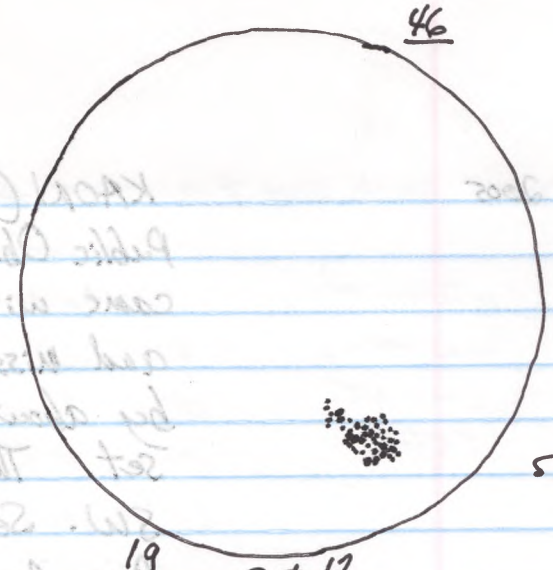
Aurora.

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.

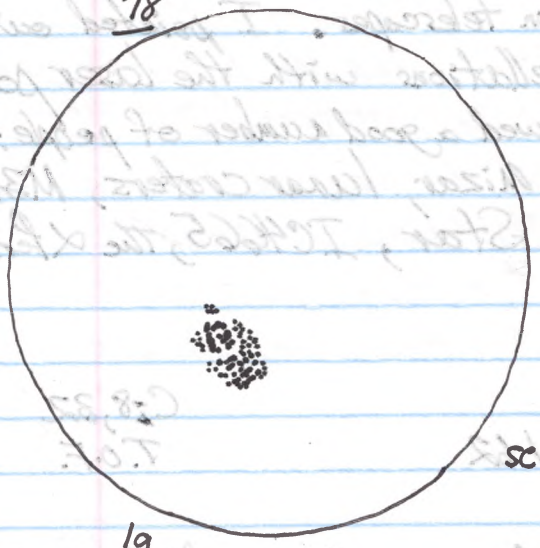
46



19
46S
RSW 56

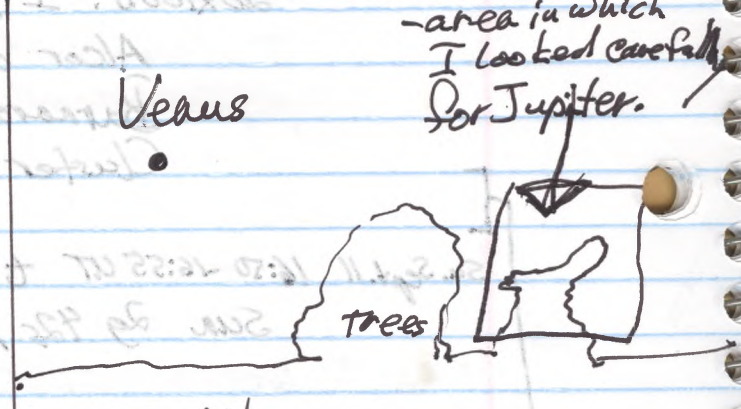
Sept. 12
17:15-17:20 UT

78



19
78S
RSW 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 SE? T88.5 (slight haze) ne
Stars of late summer; Mars rising in the E.

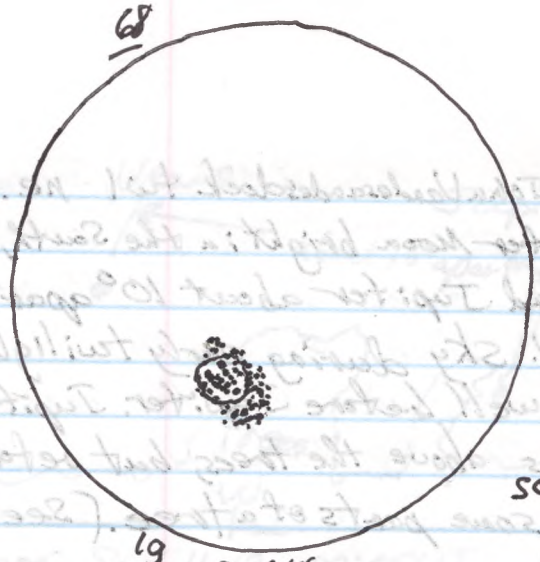
M. Sept. 12 17:15-17:20 UT t C-8, 32
sun lg 46 s RSN 56 T.O.F.

M. Sept. 12 17:55-1800 UT ad P.S.T., 20, 20E, 15.5
sun - no obvious prominences seen - very clear definition on at least 6 spots in the large sunspot group.

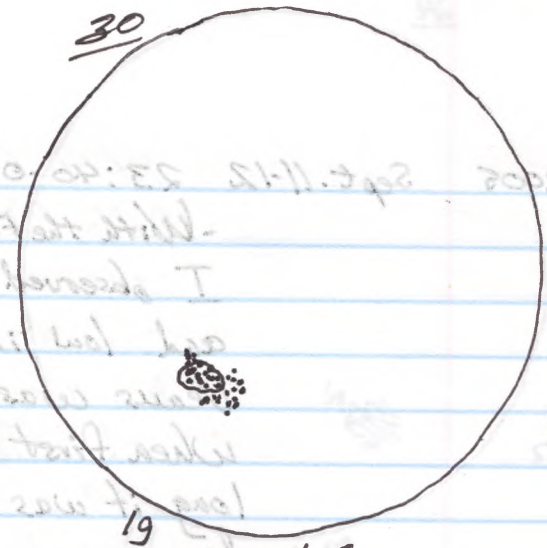
Tu. Sept. 13 15:55-16:00 UT t C-8, 32
sun lg 78 s RSN 88 T.O.F.

Tu. Sept. 13 16:10-16:15 UT ad P.S.T., 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.

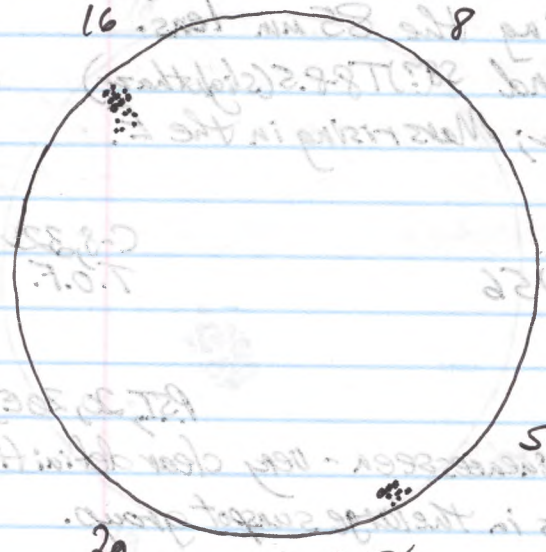
T.-W. Sept. 13-14 23:40-00:10 UT John Vandesande's dock twl ne
- With the First Quarter moon in the S. sky I observed Venus in the W., but did not knowingly see Jupiter though I looked carefully for it. (See diagram.)
ph: On later examining the photo I took, I easily saw Jupiter on it.
graph



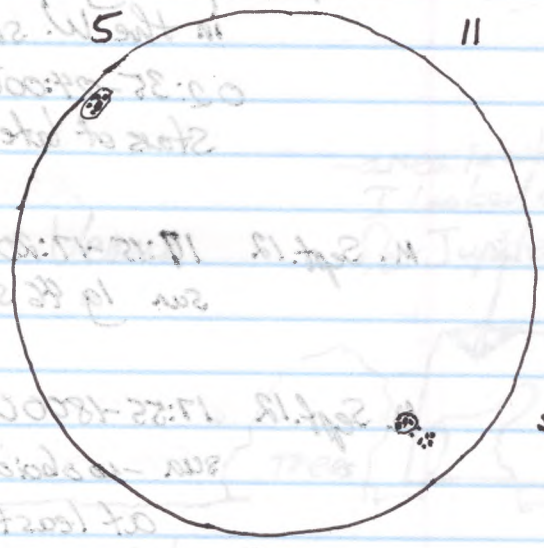
19
68s
RSN78
Sept. 14
15:45-15:50 UT



19
30s
RSN40
Sept. 15.
17:50-17:55 UT



2g
24s
RSN44
Sept. 18
14:30-14:35 UT



2g
16s
RSN36
Sept. 19
15:35-15:40 UT

2005 W. Sept. 14 15:45-15:50UT C-8, 32
Sun 1g 68s RSN78 T.O.F.

W. Sept. 14 16:05-16:10UT 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 17:50-17:55UT t C-8, 32, 28, 20, 15.5
Sun 1g 30s RSN40 (seeing: not good) T.O.F

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

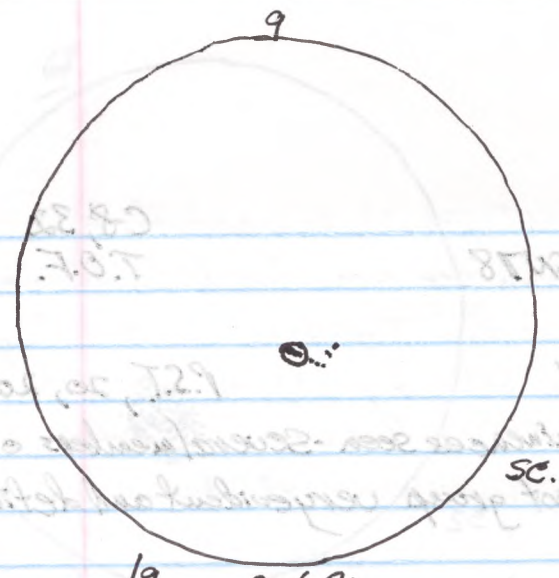
Su. Sept. 18 14:30-14:35UT t C-8, 32, 28, 20, 15.5
Sun 2g 24s RSN44 T.O.F.

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 promences - with the 15.5mm eyepiece.

S.-M. Sept. 18-19, 03:25-03:35UT nd ST(?)T3 (tml, 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 15:35-15:40UT t C-8, 32
Sun 2g 16s RSN36. 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;



lg
9s
RSW19

Sept. 21
17:15-17:20 UT

2005 possibly some hints of faint prominences.

T.-W. Sept 20-21 01:00-01:30UT y 5@175 (gml) ne; 18X50156

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

18X50156: area of Neptune, M15, M31, Keenble's Cascade, Keenble 2, M13, M92.

W. Sept. 21 17:15-17:20UT t C8, 32, 28, 20, 15.5 T.O.F.

sun lg 9s RSN19

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

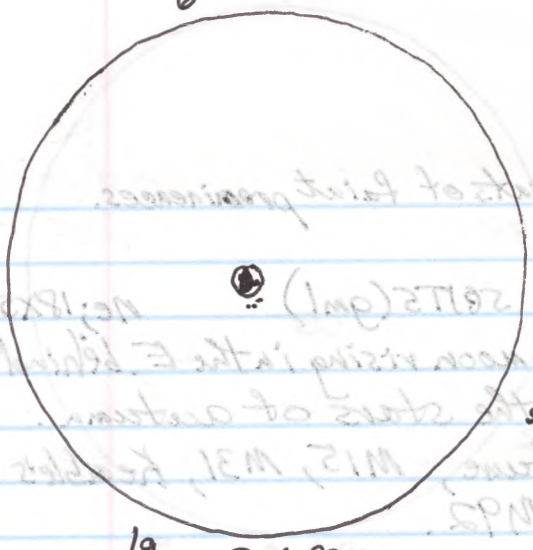
W.-Th. Sept. 21-22 00:25-01:05UT y 5@179 (at end of twil) ne; 18X50156

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

18X50156: area of Uranus, area of Neptune, M11, M26, M16, M17, M18, M8, M20, M21, M22, M23, M24, M25, M27, M13, M92, M15, M31, M32, M110, M10, M12, RCorBor, TCorBor, IC4665, Barnard's Star, Keenble's Cascade, Keenble 2, DDra-DS, Double Cluster, Stock 2, some of the χ 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 00:44UT. That was also the minute given for moonrise, and so after that time the transparency in the E. was compromised by moonlight.

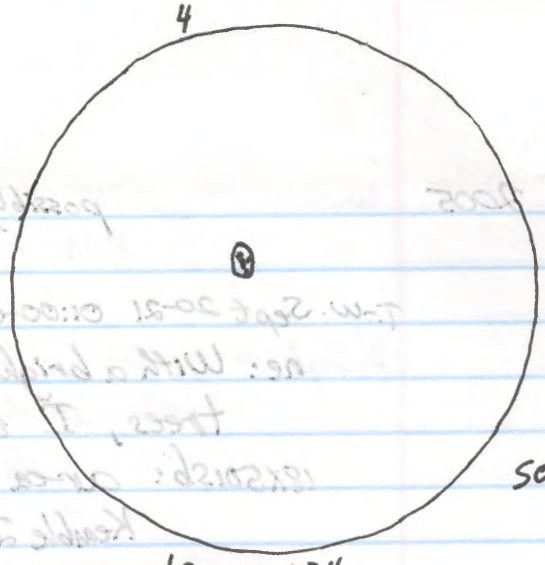
6



SC.

19
6S
RSN16 Sept. 23
16:40-16:45 UT

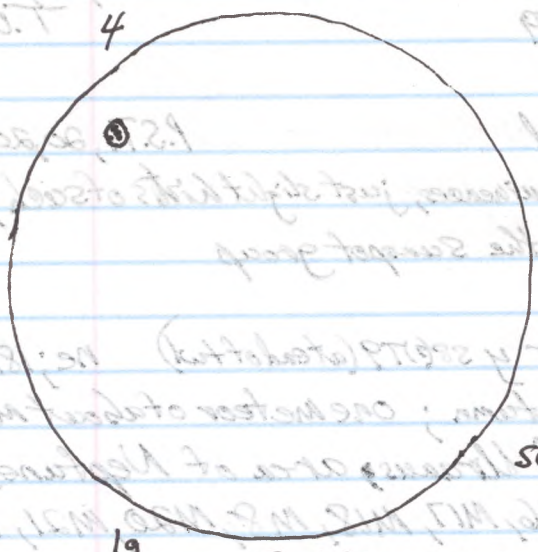
4



SC

19 Sept. 24
4S
RSN14 14:25-14:30 UT

4



SC

19
4S
RSN14 Sept. 27
17:10-17:15 UT

2005 F. Sept. 23 16:40-16:45 UT t C-8, 32, 28, 20, 15.5
sun lg 6s RSN 16 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 S8(?)T9 (in most areas of the sky (very good transparency), ^) 18x50s6 ne; ^
ne: stars of autumn
18x50s6: 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.

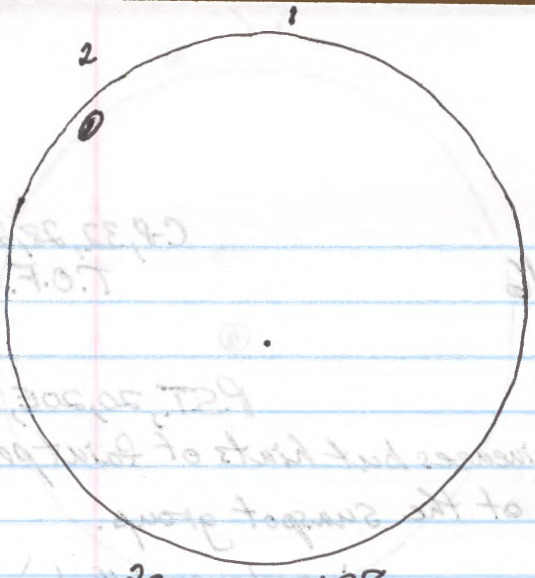
Sa. Sept. 24 14:25-14:30 UT t C-8, 32
sun lg 4s RSN 14 T.O.F.

Sa.-Su. Sept. 24-25 01:45-02:30 UT y (S8(?)T 3-6 (cloud; haze) varied; ^) ne; 18x50s6
ne: stars of autumn; one bright meteor of about 2nd mag. in E.; Mars in E.
18x50s6: Uranus and area; Neptune and area, M15.

Th. Sept. 27 17:10-17:15 UT t C-8, 32, 28, 20, 15.5
sun lg 4s. RSN 14 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 oo S8(?)T 9-9.5(!) ne; 20x100b, C-14, 19
ne: stars of autumn; Mars very bright in the E., a meteor



2g
35
RSN23

Sept. 28
17:10 - 17:15 UT

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 CorBor 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.

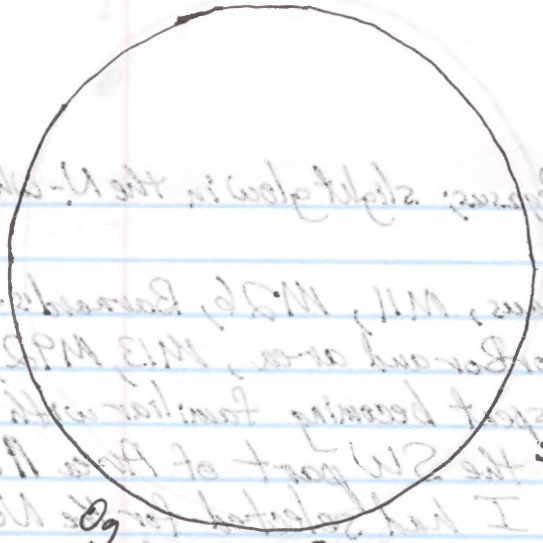
ph: photographed area of Mars, My Nova Search Area II, and area of M42 rising.

W. Sept. 28 17:10-17:15 UT t C8, 32, 28, 20, 15.5
sun 2g 3s RSN23 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 (T6 at end - cloud) 18 ^ ne; 18X50 lsb
ne: stars of autumn; Mars in the E.; one or two meteors.

18X50 lsb: 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. 2h 04m 05s Dec. +14° 10'. The star was supposed to dip in



Og
Os
RSNO

Sept. 30
17:55-18:00 UT

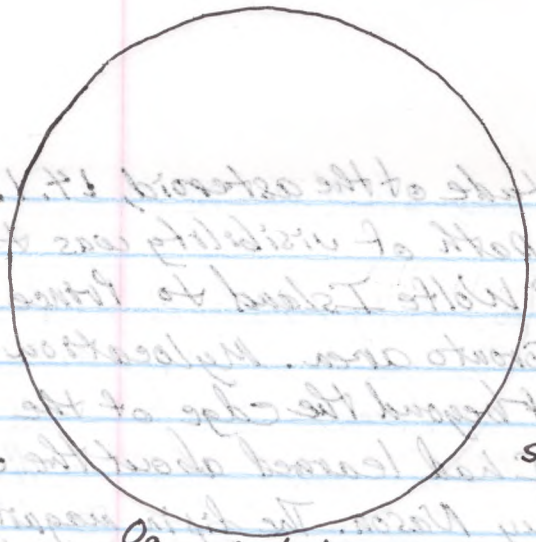
2005

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 Dactyla 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.

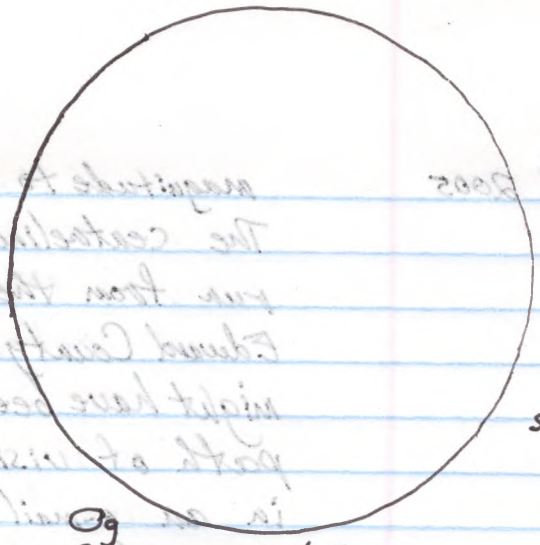
F. Sept. 30 17:55-18:00 UT t C-8, 32
Sun 0g 0s R.SN 0 T.O.F.

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 02:40-07:00 UT 00 some cloud at beginning 5 8(?)TT9-9.5(!)λ ne; 18X50s6; 20X1006
ne: stars of autumn; Mars; several fairly bright meteors, M31
18X50s6: Ursa Major area, Neptune and area, M31, M32, M110, M33, Double Cluster, Stock 2, Kemble 2, Draconis-DS, M38, M2, M13, M92, Pleiades, Hyades
20X1006: - Carefully examined part of Area 11 of the Nova Search Program - in the constellation Pisces, also M35, M36, M37,



Og
Os Oct. 1.
RSNO 17:55-18:00 UT



Og
Os Oct. 2
RSNO 17:25-17:30 UT

2005 M38, M42, M43, Pleiades.

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

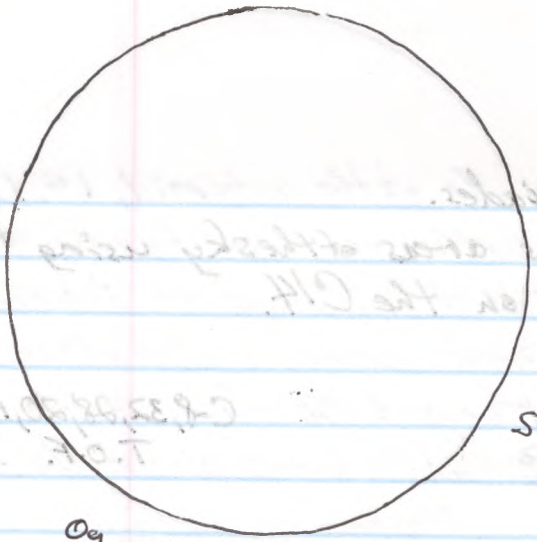
Sa. Oct. 1 17:55-18:00UT t — C-8, 32, 28, 20, 155
sun O_9 O_5 RSNO — T.O.F.

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

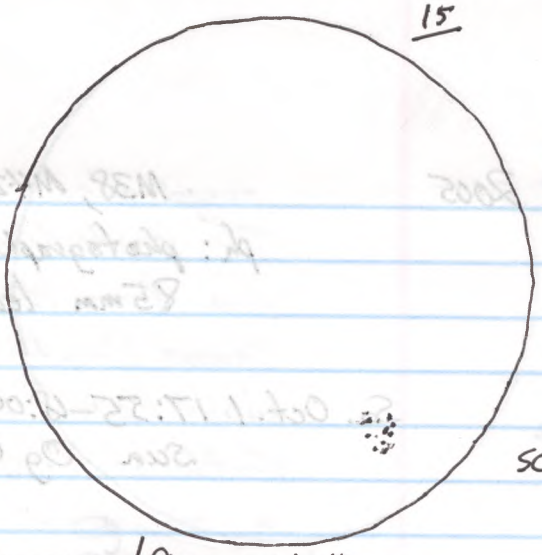
Sa.-Su. Oct. 1-2 02:15-06:15UT 00 S8(IT 7-9:^ (poorer in first ½ of session) — 19, 7.4, 9
ne; 18x50sb; C-14, ^
ne: stars of autumn; Mars in E., a couple of meteors.
18x50sb: Neptune and area, Uranus and area, M11 and R Scuti, M26, Barnard's Star, IC4665, TCorBor and area, Kemble's Cascade, Kemble 2, DDra-DS, NGC7789, M31, M32, M110, 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 17:25-17:30UT t — C-8, 22
sun O_9 O_5 RSNO — T.O.F.

Su. Oct. 2 17:35-17:40UT nd — P.S.T. 20, 20E, 15.5
sun - no obvious prominences, but hints of several prominences noticed.



Og
Os Oct. 3
RSN0 16:25-16:30UT



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

2005 Su.-M. Oct. 2-3 00:50-05:30 UT 00 (58T8-9 varied) ne; 18x50 lsb; 20x100b

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

18x50 lsb: Uranus and area, Neptune and area, Barnards Star and area, IC4665, T Cor Bor and area, R Cor Bor, M13, M92, Keubles Cascade, Keuble 2, V Draconis - D.S., NGC7789, Double Cluster in Perseus and Stock 2, M15, M31, M32, M33, M110.

20x100b: careful study of Area 11 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 C-8, 32
Sun 0g 0s RSN0 T. O.F.

M. Oct. 3 16:35-16:40 UT nd P.S.T., 20, 20E, 15.5
sun - no obvious prominences but some hints of prominences

Tu. Oct. 4 17:10-17:15 UT t C-8, 32, 28, 20, 15.5
sun 1g 1s RSN25 T.O.F.

Tu. Oct. 4 17:20-17:25 UT nd P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but a few hints of prominences.

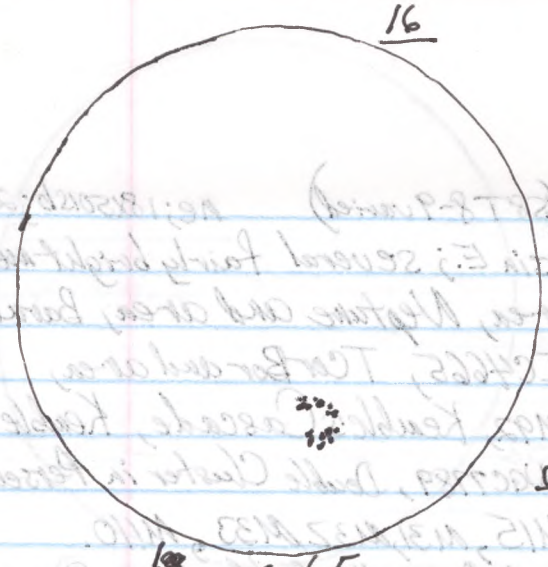
Tu.-W. Oct. 4-5 01:50-03:40 UT y (haze) nd 58T6-7 ne; 18x50 lsb

ne: Stars of autumn; Mars in E. ⊛

18x50 lsb: Uranus and area; Neptune and area; M15, M2, M13, M92, M31, M32, M33, M110, Keubles Cascade, Keuble 2, V Draconis - DS, M27, M57, Col 99, M71.

BOTH βLyr+ δCep at min. 4th. ⊛ ne: βLyrae at min. at mag. 4.4; δ Cephei at min. at mag. 4.4

16

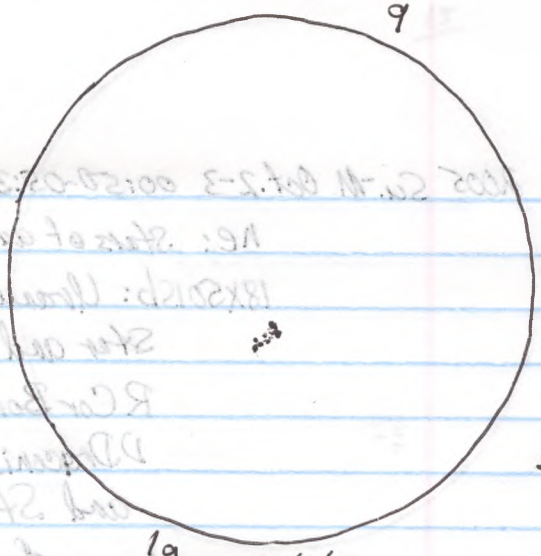


SC

lg
16s
RSN26

Oct. 5
16:40-16:45 UT

9



SC

1g
9s
RSN19

Oct. 6

2005 W. Oct. 5, 16:40-16:45 UT t C-8, 32
sun lg 16s RSN 26 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 oo SS? T 8-9 ne; 18x50 lsb; 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, appearing brilliantly white with some green as it briefly seemed to explode; Mars very bright in the E. ⊛

Fireball of mag. -9 to -10!

18x50 lsb: 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 11; M71

20x100b: carefully examined some areas of Nova Search Area 11

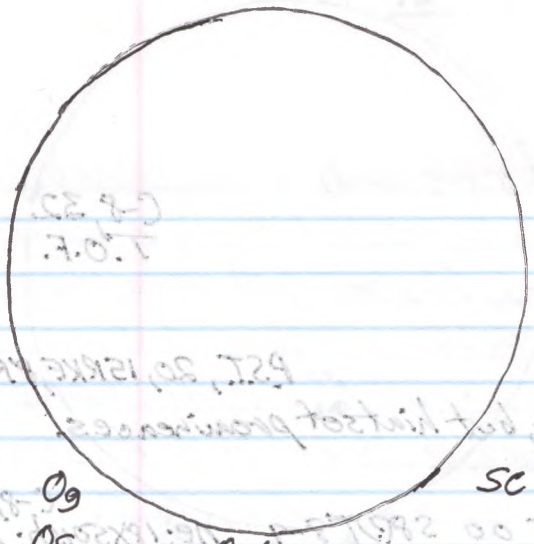
C-14, 19: M31, Mars - polar cap discernible - also viewed Mars with the 7.4mm ocular.

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

β Lyrae at mag. 4.3

δ Cephei at mag. 4.1

Th. Oct. 6 18:15-18:20 UT t C-8, 32
sun lg 9s RSN 19 T.O.F.


Oct.21
17:25-17:30UT

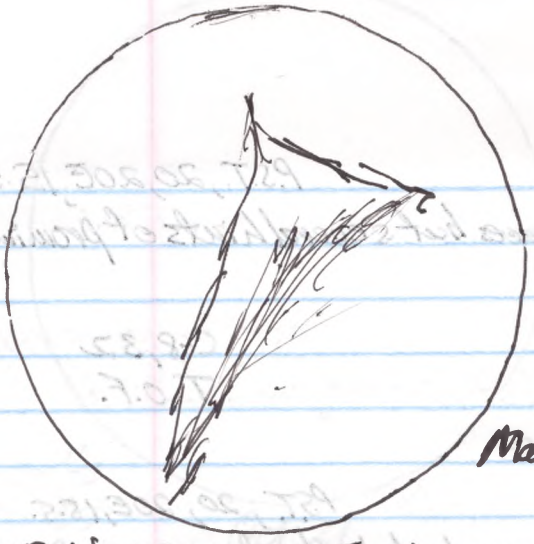
2005 Th. Oct. 6 19:00-19:05 UT nd P.S.T., 20, 20E, 15.5
Sun - no obvious prominences but several hints of prominences.

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

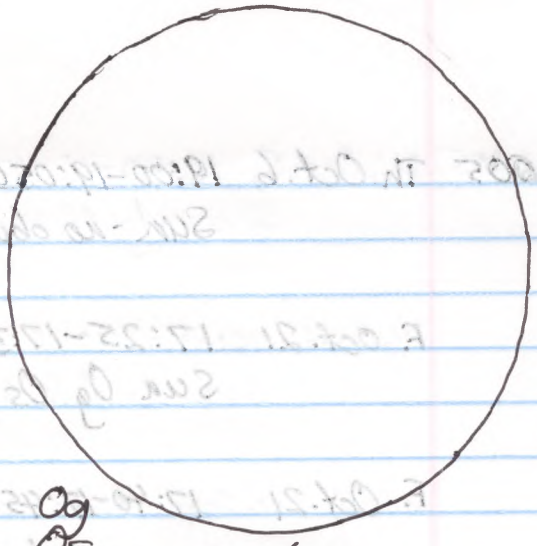
F-S Oct. 21-22 00:05-00:45 UT y+nd S7T8.5-9 ne; 18X50 1sb
ne: stars of autumn; Mars in E; meteor of about mag. 2.5 in Pegasus.
18X50 1sb: area of Uranus, area of Neptune, M2, M11 and R Scuti, M15, Double Cluster and Stock 2, Kemble's Cascade, parts of Area 11 of the Sky Search Program, M31, M33, Mars.

S-S. Oct. 29-30 00:10-03:45 UT .00 S7-8T7-9 Clouds for a while; for a while 18X50sb; C-14 cirrus, slight fog ne; 20x100b.
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 3h 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.
18X50 1sb: Area 11 of my Sky Search Program,



Mars

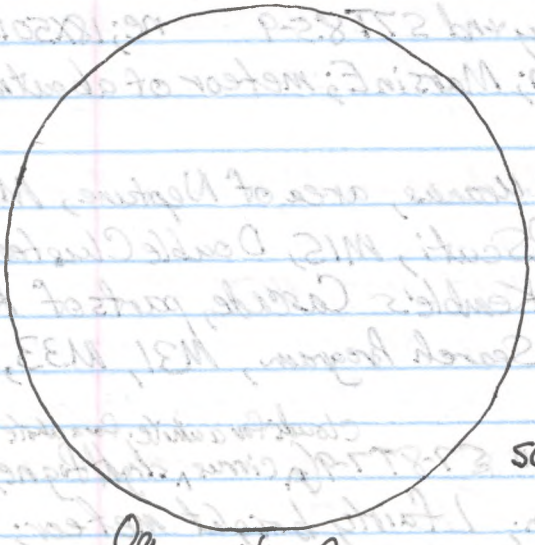
2005, Nov. 30, 3:20 UT - Appearance of Mars at 205.8X under a red filter at about the time of Closest Approach



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 Scuti, R CorBor, T CorBor, 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 C-8, 32, 28, 20, 15.5
Sun Og Os RSNO T.O.F.

Su. Oct. 30 17:55-18:00 UT nd P.S.T. - 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 S-9 T9-9.5! ne; 18x50B&b
ne: stars of autumn; Mars very bright and high in the SE; several bright meteors.
18x50B&b: area of Uranus, various areas within Area II of the Sky Search Program, Kemble's Cascade, M35, M36, M37, M38, M42, M43, M45, Hyades, Mars, areas of Cetus, Orion and Gemini, ~~Rkepaud~~ area near FR Lep. though the star itself may have been too faint to see in the binoculars.

W. Nov. 2 17:15-17:20 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

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 yandss 5(?)T 8-9 ne; 20x100; C-8, 32
ne: stars of ~~winter~~ autumn; Mars in the E.
20x60b: 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. 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 α: 21h 06m 15.78s δ: -12° 50' 53.9" I found the area quite easily. (See 4299, 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 printed 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.

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

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

2005 thought that I saw that planet in the eyepice, but may not have been absolutely certain. I tried to move N. from the area of the star ε 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

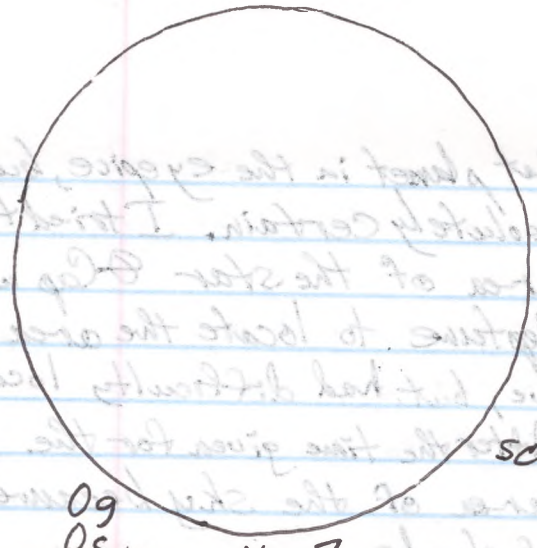
During twilight, which would end at about 23:33 UT, I observed the passage of the International

ISS 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

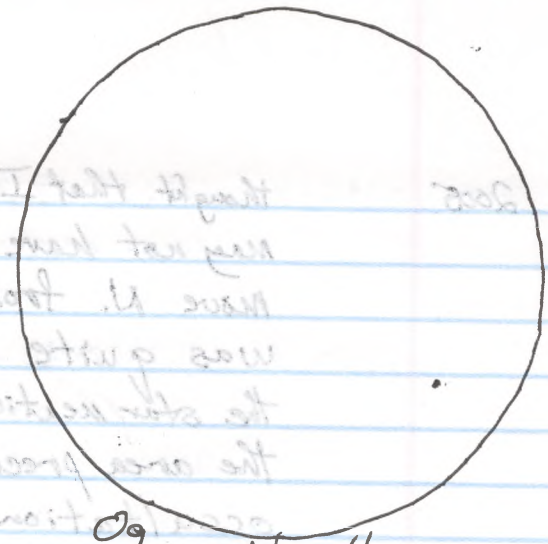
F.-S. Nov. 4-5 03:50-04:30 UT y S8(?)T8(water vapour) ne; 18X50156, ne: stars of autumn, Mars very bright and high in the SE; a brilliant flash near the end of the session which may possibly have been from an unseen meteor behind me in the N. sky, but I was not sure of its cause.

bright flash (?)

18X50156: M35, M36, M37, M38, M45, the Hyades, area of R Lep. areas in the constellations Orion and Cetus, the area ll of the Sky Search Program.



09
OS
RSNO Nov. 7
17:40-17:45 UT



09
OS
RSNO Nov. 11
17:55-18:00 UT

2005 M. Nov. 7 17:40-17:45 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.

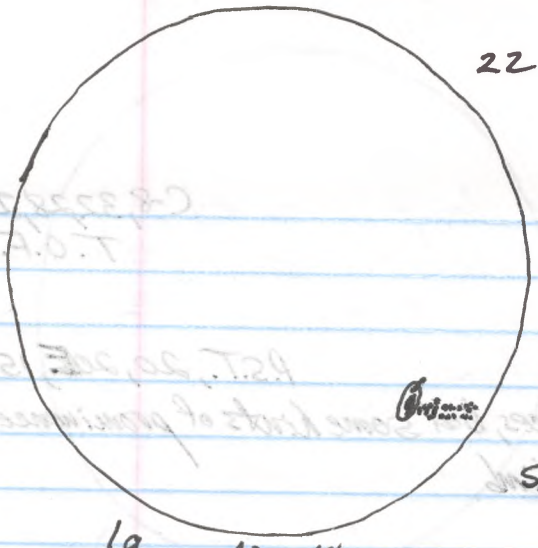
M. Nov. 7 17:50-17:55 UT y P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but some hints of prominences on the southern limb.

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

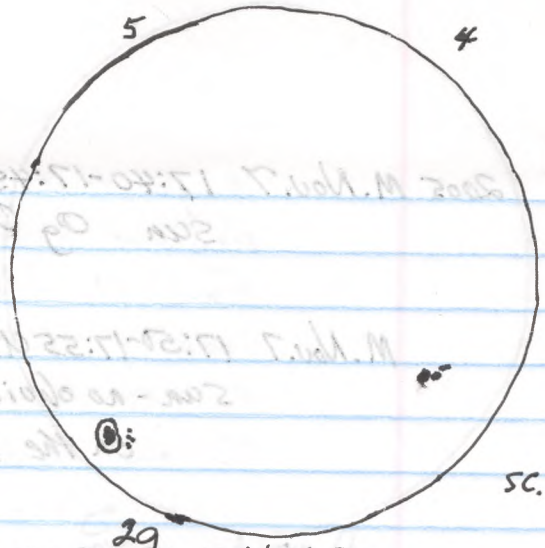
Tu. Nov. 8 18:55-19:00 UT y P.S.T., 20, 20E, 15.5
sun - no obvious prominences, but hints of prominences on the southern limb.

Tu-W. Nov. 8-9 23:40-00:00 UT y S6T7 (fgnl) ne; 18X50Sb
ne: stars of autumn; Mars in E; First Quarter Moon in the S.
18X50Sb: - 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 S7(?)T9 ne; 18X50Sb
ne: stars of autumn and winter; Mars very bright and very high in the S.; 3 meteors, two of which were almost certainly Taurids.
18X50Sb: M35, M36, M37, M38, M42, M43, M1, area of RLep, some parts of Area II of the Sky Search Program.

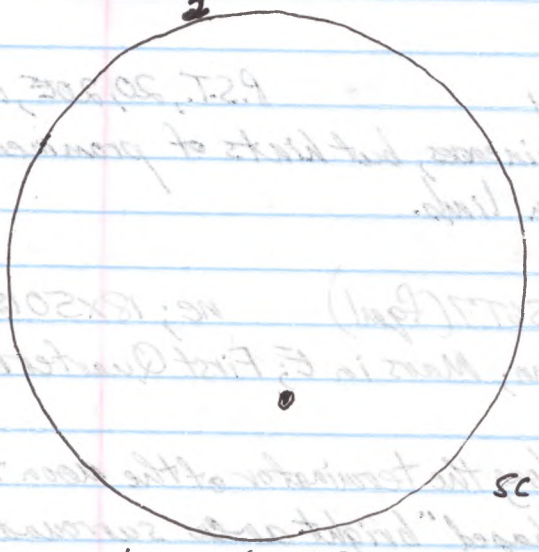
F Nov. 11 17:55-18:00 UT t C-8, 32, 28, 20, 15.5
sun Og Os RSNO T.O.F.



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



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



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

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 22s RSN32 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. 23 18:15-18:20 UT t C-8, 32, 28, 20, 15.5
sun 2g 9s RSN29 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; 18X50156
ne: stars of autumn and early winter; Mars very bright in Aries.
18X50156: M1, M35, M36, M37, M38, M42, M43, Kemble's Cascade, area of RLep, some parts of Area 11 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 2s RSN12 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; gm1) ne
- a very bright gibbous moon, about 2½ days before Full Moon, very near the zenith and Mars about 10 degrees from the moon in a SW direction

"near-zenith" moon.

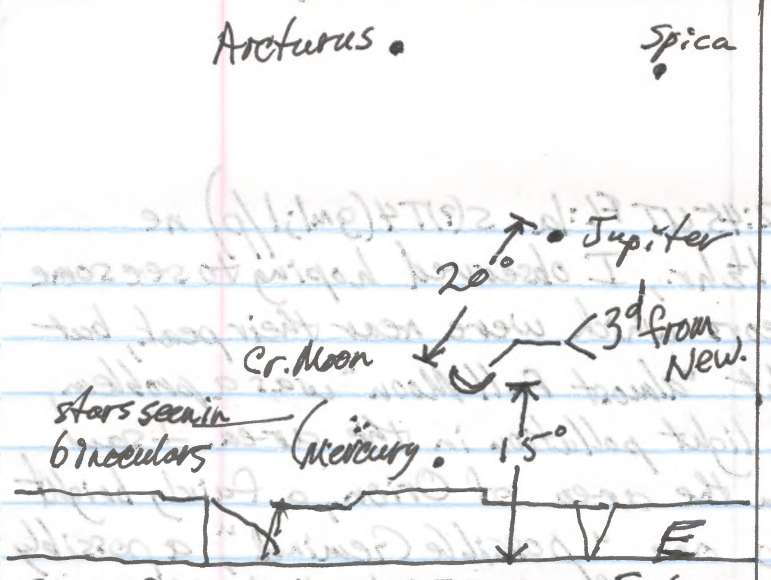
2005 T.-W. Dec. 13-14 01:10-02:45 UT FL: la S(?)T4(gml; l/p) ne
- For over 1½ hr., I observed hoping to see some Geminid meteors which were near their peak, but the very bright "almost Full Moon" was a problem, as was the light pollution in the area. I saw one Geminid in the area of Orion, a fairly bright 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.

1 Geminid and 1 "possible Geminid"

6:08-6:10 a.m. E.S.T.
11:08-11:10 UT FL: lanai 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: la S(?)T4(gml; l/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.

5:30-5:35 a.m. E.S.T.
10:30-10:35 UT FL: lanai twl ne
After the beginning of morning twilight I saw Jupiter in the



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

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.

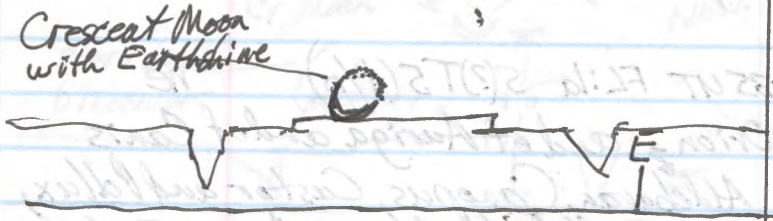
M.-T. Dec. 26-27 04:30-05:00 UT FL:la S8(?)T6(1/p) ne; 18X50156
ne: stars of winter; Mars, Saturn
18X50156: areas of Orion, M42, M43, Pleiades, Hyades, area of R Lep (but the star appeared too faint to be seen), area of NGC 2244, Mars and area near the bright stars of Aries, Saturn, M35, M36, M37, and 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.
5:50-6:00 a.m. E.S.T
M. 10:50-11:00 FL:lanai beginning of twl. ne; 18X50156
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 Mercury was below. (See diagram)
18X50156: Jupiter, Crescent moon and stars in the area.

Arcturus •

Spica •

Jupiter •

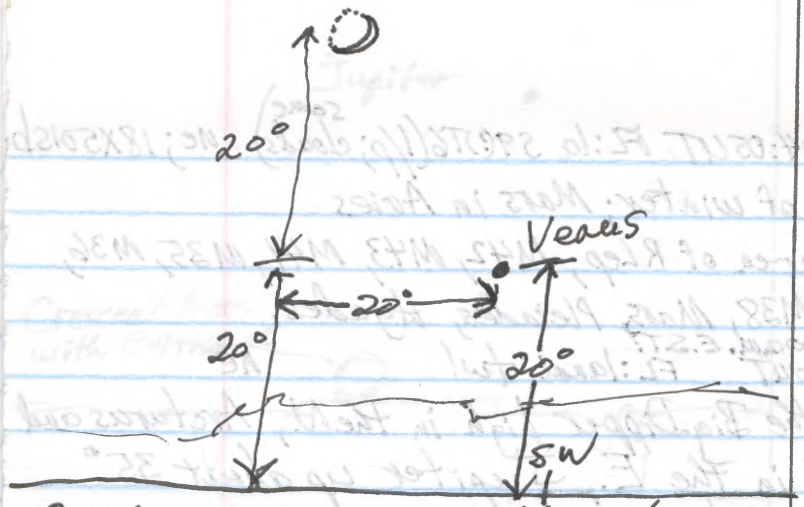


2006 Nov. 29 11:20 UT View to E as thin Crescent Moon is seen above roof

2005 W.-Th. Dec. 28-29 03:25-04:05 UT FL:1a S9(?)T6(1/p; some clouds) ne; 18X50ISb
ne: stars of winter; Mars in Aries
18X50ISb: area of RLep, 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:1a S8(?)T6(1/p) ne; 18X50ISb
ne: stars of winter; Mars in Aries, Saturn in the E.
18X50ISb: area of RLep, 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 S9(?)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:1a S9;T6→4(1/p, haze) ne; 18X50ISb
ne: stars of winter, Mars in Aries
18X50ISb: 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.

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

Crescent Moon

-I observed the thin Crescent Moon, 44h 8m (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:1a 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:1a 9T6(1/p) ne; 18X50 15b

ne: stars of winter, Mars in Aries, Saturn in Cancer.

18X50 15b: M31, M35, M36, M37, M38, M41, M42, M43, M45, Hyades, Mars, areas of Aries, α Persei Cluster, Double Cluster in Perseus and Stock 2 nearby, area of Kemble'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:1a 9T6(1/p) ne; 18X50 15b

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.

18X50 15b: Mars, Saturn, M42, M43, areas of Orion, M41, NGC 2244 and stars in the area, α 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

6:20-6:25a.m. E.S.T.
M. 10:20-10:25 UT FL: Iaaai 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; 18x50sb 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.

18x50 LSb: 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, α Persei Cluster, Saturn and nearby M44.

6:05-6:10a.m. E.S.T.
M. 11:05-11:10 UT FL: Iaaai 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 03:52-04:30 UT FL: la SQT5(1/p; tgml) ne; 18x50 LSb ne: ~~Mars~~ First Quarter Moon up about 30° in the SW, and Mars about 20° above the moon, Stars of winter, and Saturn well up in the East.

2006 18x50ISb: M42 and possibly hints of M43 though somewhat difficulty because of the ambient lighting, areas of Orion, area of RLep, NGC 2244 and nearby AX Mon and Plaskett's Star, SMon 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.

6:15-6:20a.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.

6:00-6:05a.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.

5:05-5:10a.m.E.S.T.
Th.-F. Jan. 12-13 m 10:05-10:10 UT FL: lanai S?T3(fml;Vp;cloud some) 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 S?T4(Vp;gml) ne
I observed for a very short while in spite of the

2006

light pollution and the very bright gibbous moon a little more than 2½ 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.
M. 10:25-10:30 UT FL: Lanai S?T4(I/p; gnl; clouds 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 S9(?)T5(I/p; gnl) 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 S8(?)T6(I/p) ne; 18X50 6
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 was seen 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

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.

18X50 I S b: M42 and M43 and other areas of Orion, M46 and M47, M41 and nearby area in Canis Major, Pleiades, Hyades, NGC2244 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 5:05-5:10 a.m. E.S.T. FL: 1aasi S?T3 (I/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.

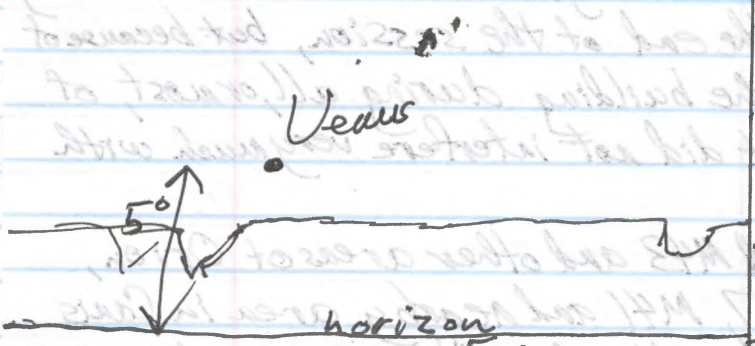
F-S. Jan. 20-21 03:10-04:20 UT. FL: 1a S9T6 (I/p) ne; 18X50 I S b

ne: stars of winter in the S. Mars in the W., Saturn in the E. in Cancer

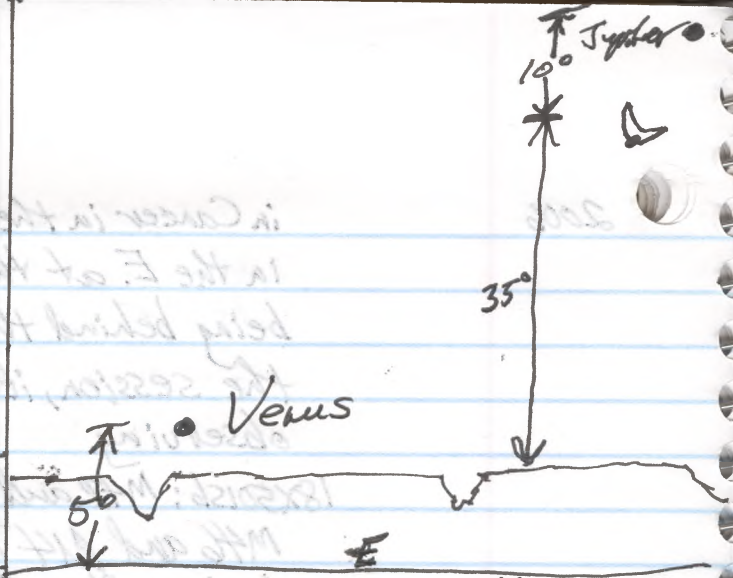
18X50 I S b: areas of Orion, M42, M43, M41, area of R Lep, M35, M36, M37, M38, M46, M47, NGC2244 and area, S Mon and the Christmas Tree cluster, Saturn and nearby M44, Mars and some stars of Aries, area of Regulus

S-S. Jan. 21-22 04:30-04:45 UT FL: 1a S9(?)T4-5 (I/p; light cloud some λ) ne

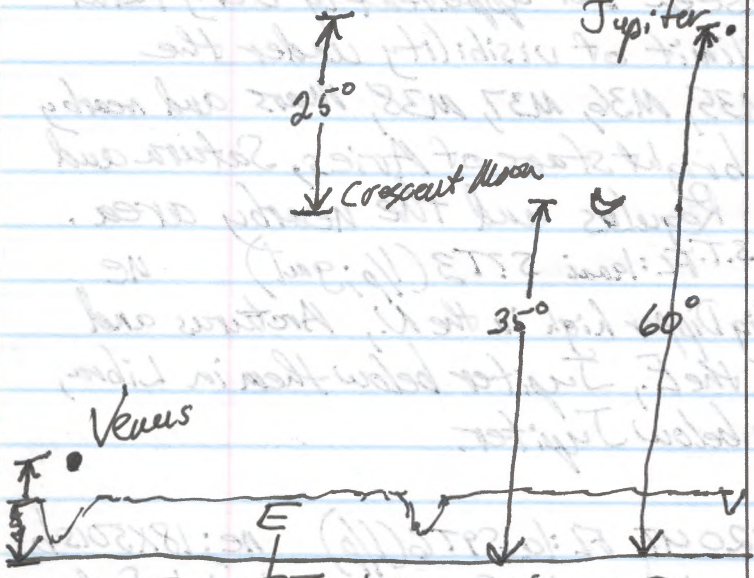
- With some very light cloud in the sky, I observed the stars of winter in the S. with Mars about 35° above the W. horizon and Saturn in Cancer



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



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



2006 Jan. 23, 11:20 UT View to E,
showing Venus, Crescent Moon, and Jupiter

2006

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 sunrise listed as going to occur at 12:15 UT

M.-T. Jan. 23-24 02:40-03:20 UT FL: la SC IT 4-5 (1/p; some cloud) ne; 18x50 lb ne: stars of winter in the SE; Mars high in the W., Saturn in the E.

18x50 lb: 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.

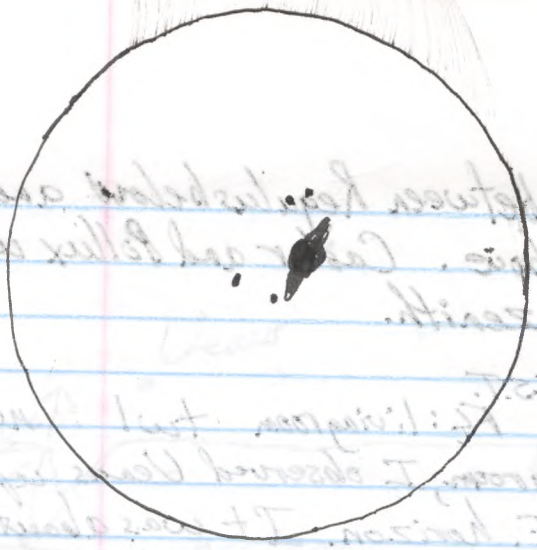
M. 11:20-11:25 UT FL: livingroom twl ne

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.

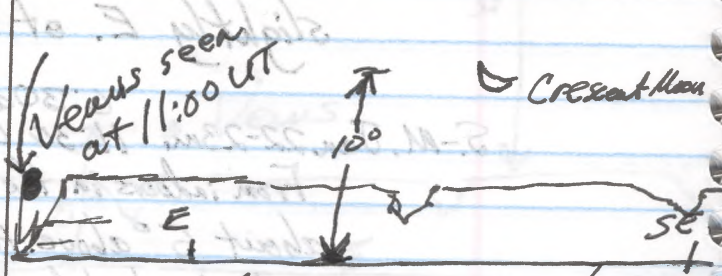
6:20-6:25 a.m. E.S.T.

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.)



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, Antares, and Jupiter

2006 W.-Th. Jan 25-26 03:55-04:00UT FL:la S9(?)T6(l/p) ne; 12½"
-ne: stars of winter high in the S.E, with Saturn high in the E and Mars high in the W.
12½": With Denise's 12½" 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 Plössl 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 area and the Trapezium. I also observed R Leonis which appeared extremely red; I was using the 12mm eyepiece

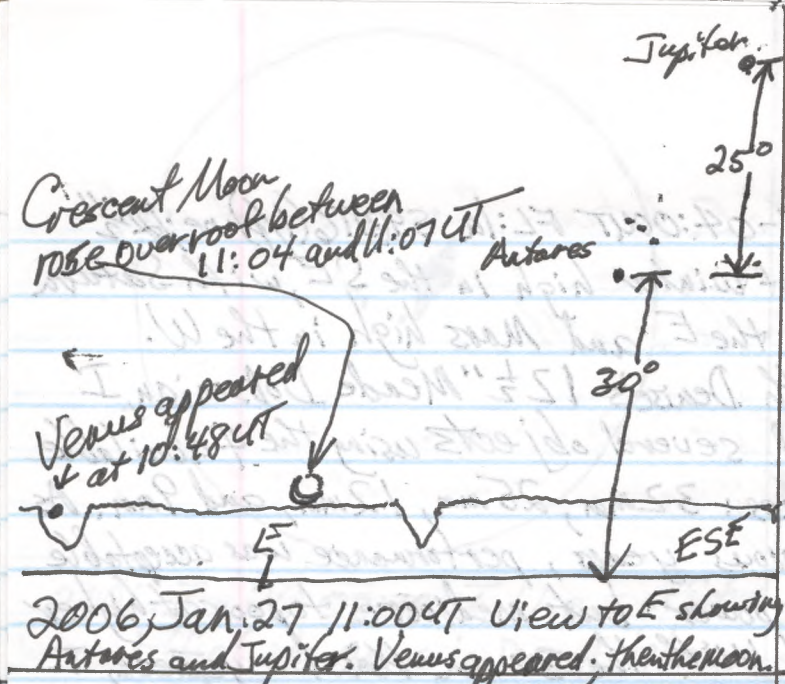
Saturn and 4 moons

Trapezium

R Leonis

5:35-5:45 a.m. E.S.T.
m. 10:35-10:45 UT FL:la+a S(?)T5(l/p; some cloud) ne
- 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.
6:00 a.m. E.S.T.
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 S-9T6(l/p) ne; 18X50LSb
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.
18X50LSb: M42, (M43) and areas of ~~Orion~~, M41,



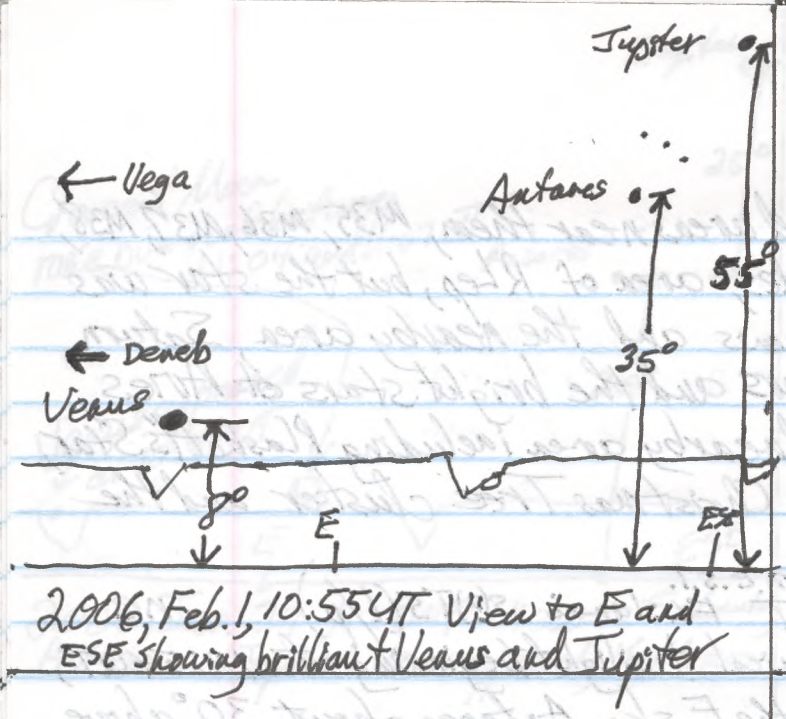
2006 Jan. 27 11:00 UT View to E showing Antares and Jupiter. Venus appeared, then the moon.

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, NGC2244 and nearby area including Plaskett's Star, S Mon and the Christmas Tree cluster and the nearby area.
5:45-6:00 a.m. E.S.T.

m. 10:45-11:00 UT FL: lanai S(?)T5 (l/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 1/4 hours from New Moon.

F.-S. Jan. 27-28 01:30-03:00 UT FL: la S(?)T4 (l/p; considerable cloud) ne; 18x50 sb ne
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.
18x50 sb: 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: la S.T 3 (l/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.



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

2006 M-T. Jan. 30-31 04:25-04:55 UT FL: la S9(?)T5(1/p; cloud some) ne; 18x50 sb

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.

18x50 sb: 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.

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

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; 18x50 sb

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

18x50 sb: 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

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 02:15-02:45UT FL:1a S8T6 (until clouds rolled in) ne; 18X50sb ne: stars of winter in SE and S, Saturn in the E, Mars in the W.

18X50sb; 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, NGC2244 and area of Plaskett'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.

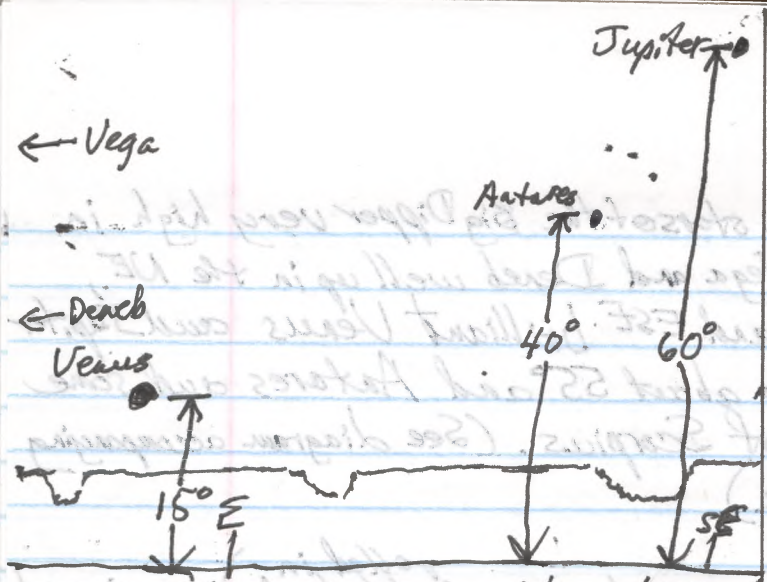
Clouds moved in during the last half of the observing session and the sky became partly cloudy.

M. 10:35-10:40UT 5:35-5:40 a.m. E.S.T. FL:1anai 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 04:25-04:30UT FL:1a 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, Feb. 6, 11:05 UT View to E. and SE.

2006 S.-S. Feb. 4-5 02:27-02:32 UT FL:1a.s.; T2-3 (1/p; fq ml; some cloud) 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:1a S;T5 (1/p; gm!) ne

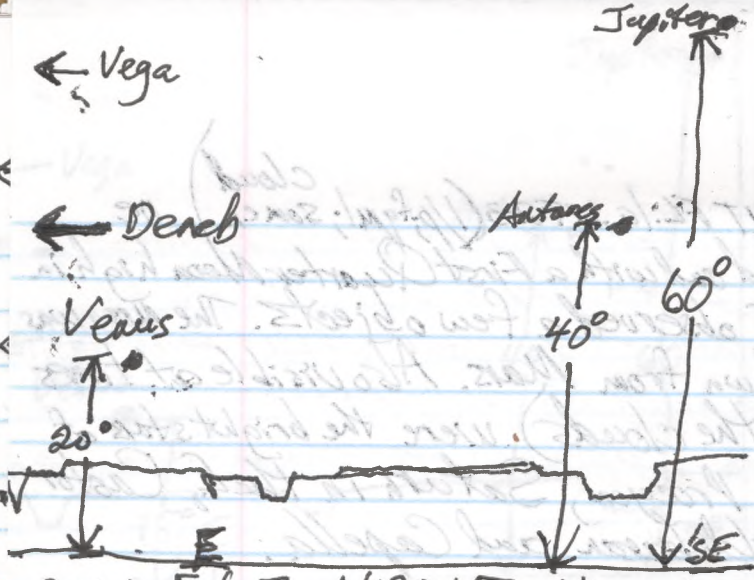
With a gibbous moon in the W about 22 hours after the time of First Quarter and about 40 to 50 degrees above the horizon and about 5 degrees above and slightly to the right from Mars, I observed the bright stars of Orion and Canis Major in the SE, and also Procyon, Castor and Pollux, Saturn (in Cancer),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

M. 11:05-11:10 UT 6:05-6:10 a.m. E.S.T. FL:1aaai twl ne

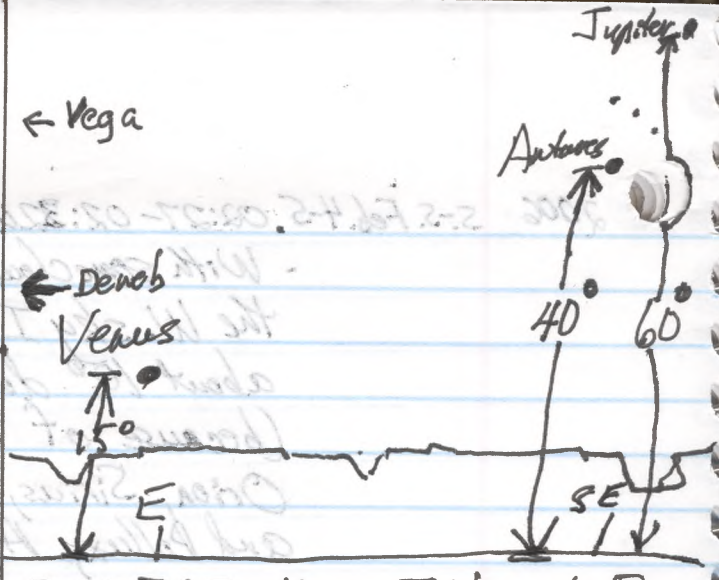
Shortly after the beginning of astronomical twilight (which began at about 10:51 UT) I observed in the E. brilliant Venus about 15° above the horizon and Jupiter in the SE about 60° above the horizon. Also seen were Antares and 3 other stars of Scorpius, and some stars of the Big Dipper high in the N.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

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

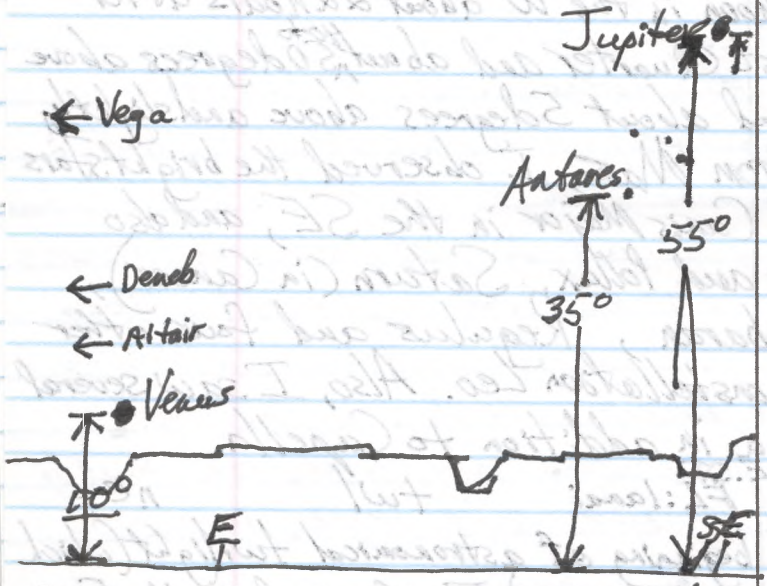
- With a bright gibbous moon high in the W. only about 25° from the zenith and about 10° NW of Aldebaran, I observed the bright stars of Orion in the S. and Sirius, Procyon, Castor and Pollux, Saturn very high in the E, Regulus and several other stars of



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



2006, Feb 8, 11:00 UT View to E. and 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 (l/p; gm l) ne; 18x50 lsb

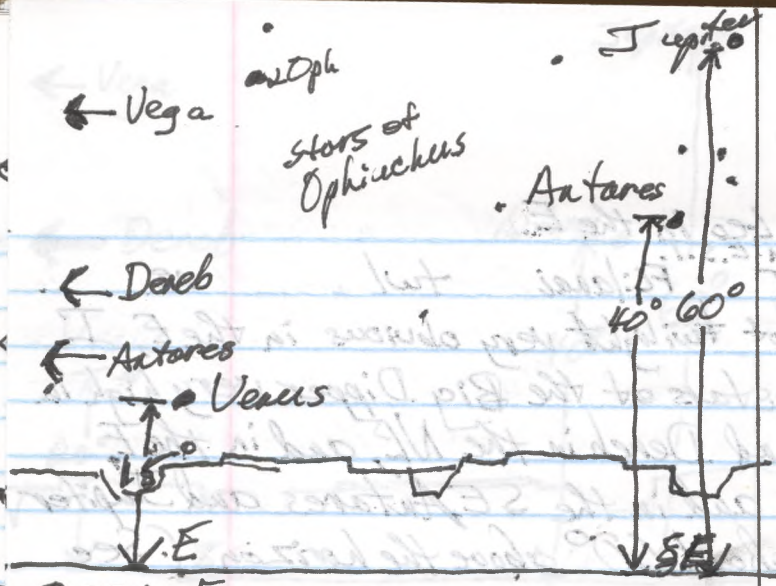
ne: With a very bright gibbous moon in Gemini and very close to the zenith, I observed the stars of winter in the S. and Saturn in the E. and Mars in the W.

18x50 lsb: M42, M43, areas of Orion, area of R Lep, M46, M47, NGC 2244 and nearby Plasketts Star and its area, the Christmas Tree Cluster and S Mon, M36, M37, M38, lunar craters on the bright gibbous moon near the zenith.

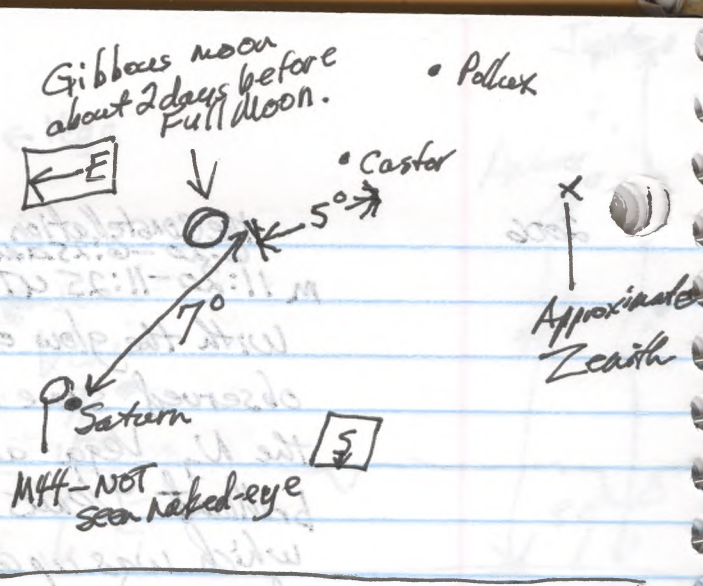
5:26 - 5:36 a.m. E.S.T.

M. 10:26 - 10:36 UT FL: lanai S(?)T 5 (l/p; gm l) 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 S.E. Brilliant Venus up about 10° and Antares up about 35° and Jupiter up about 55°.



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



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 Denebola, Mars in the W. and Aldebaran.

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

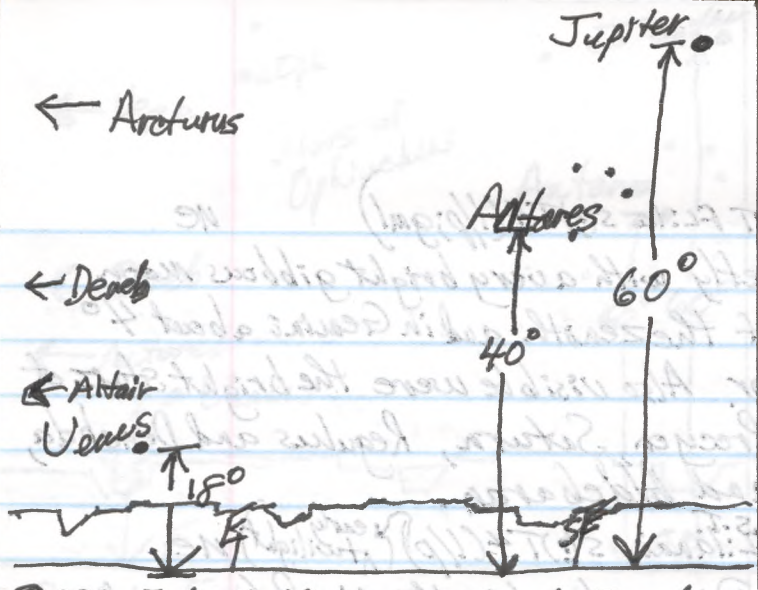
I saw the stars of the Big Dipper high in the N.; Polaris and Kochab in Ursa Minor, the Summer Triangle of stars in the NE, and in the E. brilliant Venus up about 15° and in the SE. Antares and some of the stars of Scorpius and Jupiter. Also seen were some of the stars of the constellation Ophiuchus.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

6:21-6:24 a.m. E.S.T.
S.-M. M. Feb. 12-13 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.



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

2006 M.-T. Feb. 13-14 03:50-03:55 UT FL:la S(?)T 4-5 (l/p; ~~full~~) 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.

5:50-5:55 a.m. E.S.T.

m. 10:50-10:55 UT FL:lanai 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 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?T4 (l/p; gal) 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:lanai and outside twl ne+18x50s6

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.

18X50 15p: 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 AAVSO website.

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

W.-Th. Feb 15-16 02:00-03:00 UT FL: la S(2)T6(1/pig m1) ne; 18X50 15b

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.

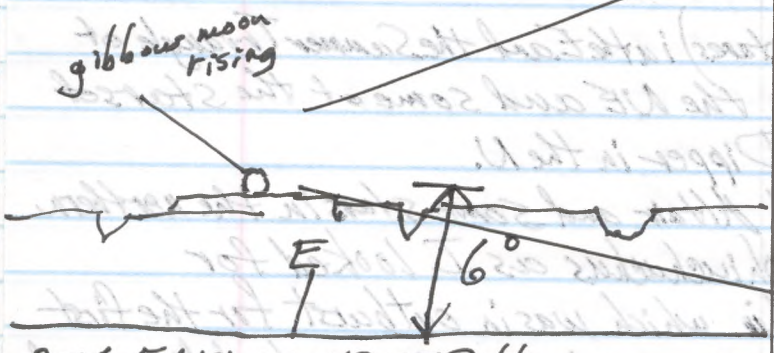
18X50 15b: M42, M43, other areas of Orion, M46, M47, NGC2244, Christmas Tree Cluster, S Mons, Plaskett's Star and area near it, M35, M36, M37, M38, Pleiades, Mars, Hyades, R Lep which was very red and very faint for the binoculars, M44 and Saturn nearby.

5:30 - 6:05 a.m. E.S.T.

M. 10:30 - 11:05 UT FL: outside and in lanai before + in twl ne + 18X50 15b

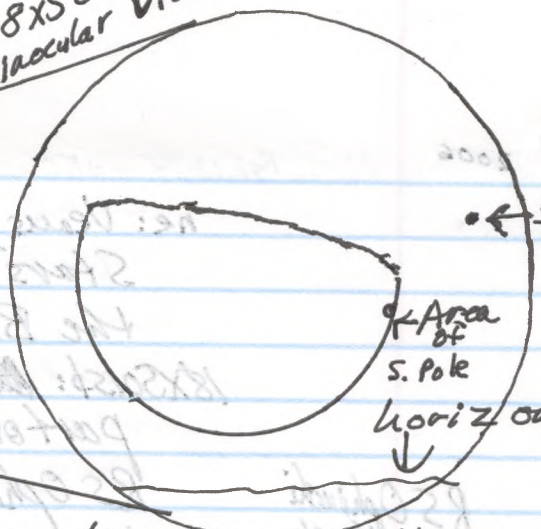
ne: Venus very brilliant in the E. and Antares, and α Ophiuchi and Summer Triangle of Stars in the NE.

18X50 15b: Though I had intended to find the



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

18x50 IS Binocular View



Binocular views 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~~ IC 4665 and Taurus Pontrowski, but had difficulty 'star hopping' quickly to the trio of stars with 30ph 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 5.7T5 (1/pigmi) ne; 18x50b ne: gibbous moon rising over roof to the E. I had read in an e-mail from Ken Kingdon of an occultation by the moon of the star Spica predicted for tonight at 03:5 0 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.

18x50 15b: 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 "miss".

6:20-6:25 a.m. E.S.T.
m. 11:20-11:25 UT FL: outside lanai twl ne; 18x50b

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 [redacted] 20 UT on Feb 17.
18x50 15b: I observed the crescent phase of Venus

S.-S. Feb. 18-19 02:45-03:20 UT FL: la S?T5 (l/p; some cloud) ne; 18x50 15b ne; stars of winter in the SE and S., Sirius, Canopus, Saturn, Castor and Pollux, Aldebaran, Capella, Mars, Pleiades.
18x50 15b: 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.

M. 10:25-11:00 UT 5:25-6:00 a.m. E.S.T. FL: outside lanai S?T5 (l/p) ne; 18x50 15b ne: brilliant Venus in E and Summer Tringle in NE
18x50 15b: Searched for RS Oph 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 HAUSC map that I was using. I "star-hopped" to the area of RS Ophiuchi from the area of Taurus Poniatowski 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 RS Oph

S.-M. Feb. 19-20 02:45-03:15 UT FL: la S?T4.5 (l/p; haze, increasing cloud) 18x50 15b ne; ne: stars of winter in the S.; Saturn in the; Mars in the W.
18x50 15b: 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

2006

10 minutes of the session

M. 5:30 - 6:00 a.m. E.S.T. FL: outside lanai S?T5 +tvl ne; 18X50lsb
10:30 - 11:00 UT

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.

18X50lsb: area of Ophiuchus around the "Taurus Poatiowski" and "Starhopping" 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 5:05-5:40UT 10:05-10:40UT FL: outside lanai S?T1(1/p; fog) ne; 18X50sb

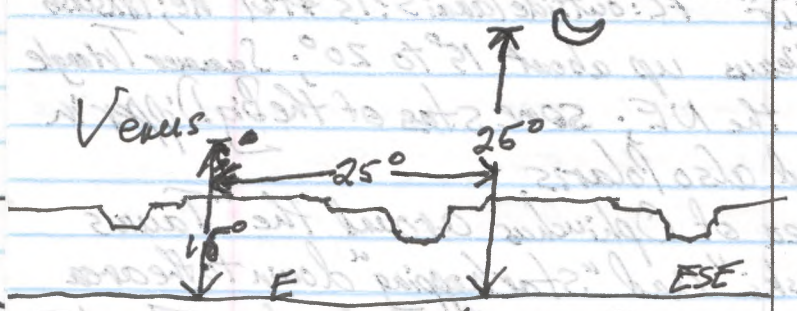
ne: With very severe fog I tried to observe the area of RS Oph, but the fog persisted. I saw the Last Quarter Moon up about 45° to 50° in the SE and Vega in the NE, but for most of the session even Deneb and Altair were not visible to the naked-eye. By times Venus was barely visible to the naked-eye.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

18X50lsb: 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 Poatiowski" and even the triangle of stars containing 5 Oph, a triangle that in NW of the location of Y Oph and of RS Oph. However, the fog prevented seeing very much in the E. sky.

T.-W. Feb. 21-22 03:00-03:50UT FL: la S8(JT5(1/p; haze, some cloud) ne; 18X50lsb

ne: stars of winter; Canopus in SE; Saturn in the E, but just E. of the zenith; Mars in the W.

Antares



2006 Feb. 23, 10:30 UT View to E and ESE
Venus and Crescent Moon.

2006

18X50ISb: M42, M43, areas of Orion, M46, M47, M35, M36, M37, M38, Pleiades and Mars nearby, Hyades, NGC2244, Plaskett's Star, Christmas Tree Cluster and S Mon, M44 and Saturn nearby, R Leonis and area, the area of R Lep.

5:25-5:50a.m.E.S.T.
M. 10:25-10:50 UT FL: outside Lanai 5?T3 (I/p; clouds; CM; ^) ne; 18X50Sb

ne: With conditions less than ideal because of a good deal of cloud in the E sky, I observed for about a ½-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, [redacted] and Polaris and Kochab.

18X50ISb: the stars of the "Taurus Poniatowski" asterism and the "3-star asterism" that includes ζ Ser and from there I was quite sure I saw Y Oph and RS 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.

Y Oph and RS Oph of almost identical magnitudes. (Following morning I was unsure that RS Oph had been identified correctly and was that bright.)

W.-Th. Feb. 22-23 03:05-04:05 UT FL: la S?T5-6 (I/p) ne; 18X50ISb

ne: stars of winter, Saturn about 10° E. of the zenith, Mars in the W.

18X50ISb: M42, M43, other areas of Orion, M46, M47, NGC2244, 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.
M. 10:20-11:00 UT FL: outside Lanai 5?T6-later twi. ne; 18X50Sb

ne: Summer Triangle in NE; brilliant Venus in E, Cr. Moon in ESE, Big Dipper high in NNW, Polaris and Kochab

2006 18X50I5b: Taurus Poatiowski asterism, and though it appeared faint, I probably got occasional glimpses of Barnard's Star. I examined the area around Y 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 AAVSO 1744-06 (a) chart – right near the star Y 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.

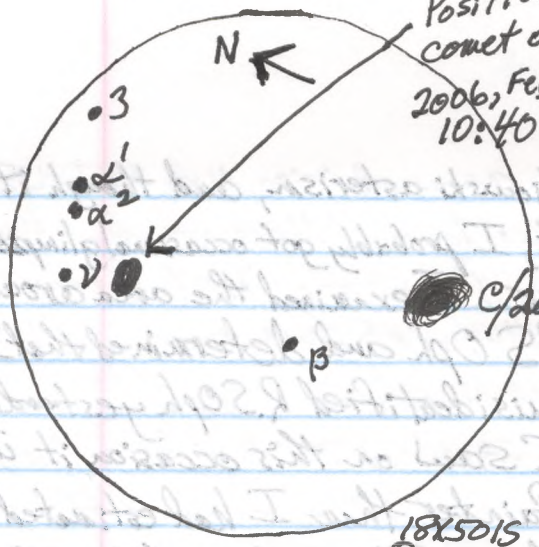
RS Oph

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; 18X50b

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.

18X50b: Briefly I had a glimpse of some, or all, of the main stars of the "Taurus Poatiowski" 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.



18K501S

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

2006 S-S. Feb 25-26 03:00-03:20 UT FL: la S(?)T 5-6 (l/p; slight cloud; slight haze) 18x50 bc ne; ^

ne: stars of winter in the S; Saturn very high near the zenith; Mars in the W.

18x50 LSb: M42, M43, M46, M47, M41, M35, M36, M37, M38, NGC 2244, nearby Plastett's Star, Christmas Tree asterism and SMon, 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 lanai S?T 5-6 (scattered cloud; l/p) 18x50 bc ne; ^

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.

18x50 LSb: 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 1½ degrees SSE of β Capricorni and 3½ 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 3 Cap being so close to α Cap. The comet was at about RA 20h 48m Dec. -16°, approximately just SE of where the (variable) AE 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 (!)

2006 S.-M. Feb. 26-27 04:20-04:25 UT FL: la S?T6 (I/p) ne

— Under very clear skies I observed the stars of winter and early spring with Orion in the S and the constellation Leo rising in the E and, in fact, up quite high in the E. Saturn was quite near the zenith

M.- 10:30-10:45 UT FL: outside Lanai S?T5-6 (I/p; very few clouds) ne; 18X50sb

ne: Jupiter, Venus, Summer Triangle of stars.

Comet C/2006 A1 (Bojnanski) (2)

18X50sb: I easily found the comet C/2006 A1 (Bojnanski) 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 the Taurus Poniatowski asterism.

RS Oph. I observed RS Ophiuchi which again was faint at perhaps about mag. 7.8 to 7.9.

M.-T. Feb. 27-28 02:25-03:15 UT S?T5 (I/p; some cirrus clouds) ne; 18X50sb

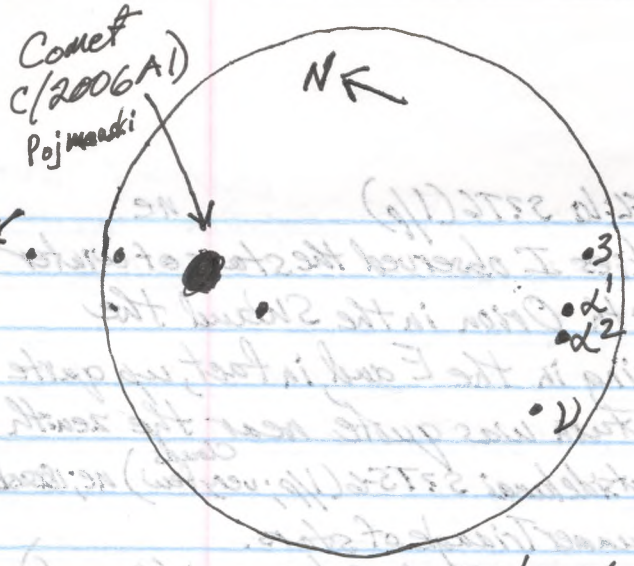
ne: stars of winter in the S., constellation Leo in the E, Canopus in the SE, Saturn about 10° SE of the zenith; Mars in the W.

18X50sb: M42, M43, areas of Orion, area of R Lep, though the star itself was not seen, M41, 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 Lanai S?T6 (I/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: star hopping to the area of the recurrent nova RS Oph: α Her, α Oph, the



2006 Feb. 28 10:40 UT: 18x50 binocular view of Comet C/2006 A1 (Pojmanski)

2006

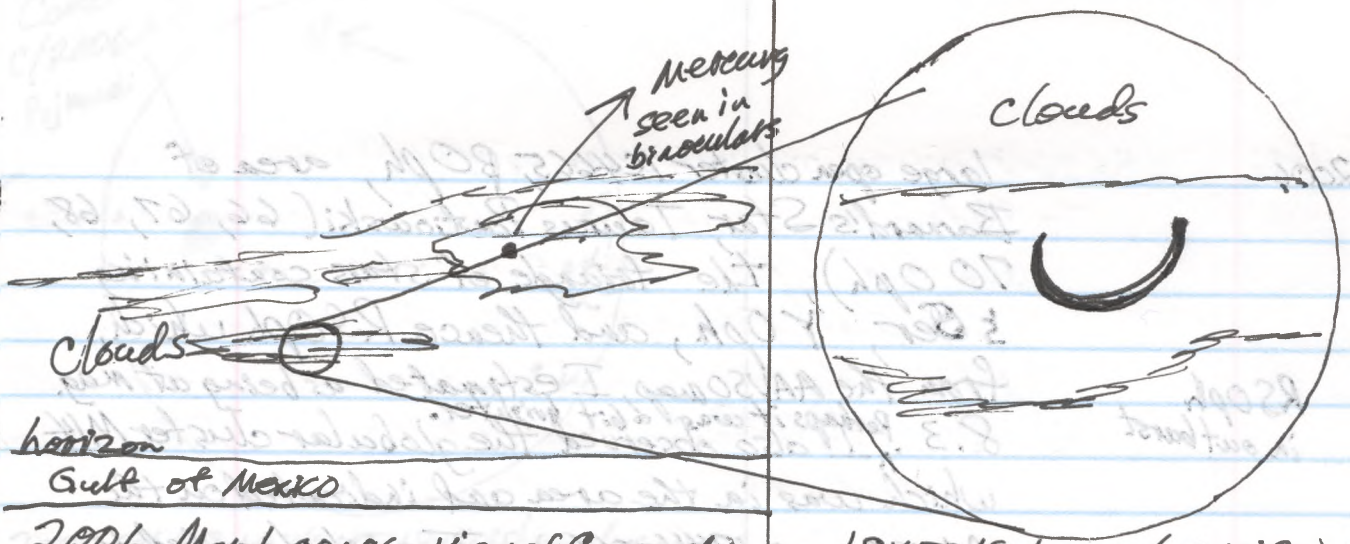
large open cluster IC4665, 8 Oph, area of Barnard's Star, Taurus Poetiowski (66, 67, 68, 70 Oph), the triangle of stars containing 5 Ser, Y Oph, and thence RS Oph which, from the AAVSO map, I estimated as being at mag. 8.3. Perhaps it was a bit brighter. I also observed the globular cluster M14 which 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 at R.A.: 20h 21m; Dec.: -10.5 degrees, almost precisely 2 ½ 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 comma may have been very slightly smaller in appearance than previously. (See diagram.)

RS Oph in outburst

Comet C/2006 A1 (Pojmanski) (3)

M.-T. Feb. 28-Mar. 1 23:45-00:20 UT along Gulf of Mexico Bonita Beach ^ twl ne; 18x50 lsb 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.

18x50 lsb: With binoculars, I scanned the



2006, Mar. 1 00:06 - View of Crescent Moon and 00:10 - View of Mercury

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

2006

"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 23h 35m old — among the clouds. It was in a break in the clouds that allowed me to see it for 2 minutes — until 00:08 UT (7:08 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. E.S.T.) 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.

Young Moon 23h 35m old. seen for over 2 min.

Mercury seen for about 5 min

03:40-04:05 UT FL: la S8T6 (clouds late 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, M41, M46, M47, NGC 2244, Plaskett's Star, 'Christmas Tree' asterism and S Mon, M35 and area, Pleiades and Mars, Hyades, R Leo is seen faintly, M44 and Saturn nearby.

5:30-6:00 a.m. E.S.T.

M. 10:30-11:00 UT FL: outside lanai S.T6(1/p); twl 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 Oph, the recurrent nova: 2 tter, α Oph, IC4665, β Oph, area of Barnard's Star, Taurus Poniatowski asterism (66, 67, 68, 70 Oph), the triangle of stars containing ξ Ser, γ Oph and

2006

RS Oph in outburst at mag. 8.2.

thence RS Oph, which from stars on the AAVSO 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 ~~ex~~pected. 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 ~~DSA~~, it was ½° SE of the variable star XZ Aquilae.) No tail was seen, but the coma appeared about as large as on the previous occasion.

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

W.-Th. Mar. 1-2 02:55-03:35 UT 5 8T5 (1/p; some haze) ne; 18X50156

ne: stars of winter in the SW; Saturn very high in the E; Mars in the W.

18X50156: 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.

M. 10:30-10:50 UT 5:30-5:50 a.m. E.S.T. FL: outside lanai 5.T 6; twl ne; 18X50156

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

18X50156: Starhopping to RS Oph: α Her, α Oph, β Oph, near IC4665, area of Barnard's Star (with hints of occasional glimpses of the star

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itself), the Taurus Poutiowski asterism (66, 67, 68, 70 Oph), the triangle of stars containing ξ Ser, ν Oph and thence RS Oph. From comparison stars on AAVSO 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.

RSoph

Comet C/2006 A1 (Pojmanski) (5)

I easily located Comet C/2006 A1 (Pojmanski) 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.: 20h26.5m; Dec: −05.3° (On Chart 124 of Uranometria 2000.0 DSA, it is located about ¼° NW of the variable star V1483.)

Th.-F. Mar. 2-3 04:00-04:05 UT FL:1a S(?)T 6 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 laaai twl ne; 18X50 15b

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.

18X50 15b: 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

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 S(?)T 4-5 (1/p; some haze, and some cloud) ne; 18X50 15b

ne: Saturn near the zenith, Mars about 30° above the W. horizon; Orion in the SW.

18X50 15b: M42, other areas of Orion, area of R Lep but the star itself was not seen, M46, M47, NGC2244 and area nearby, Plaskett's Star, 'Christmas Tree' asterism, M35, M36, M37, M38, Rosette's - fairly faint and surrounding area, M41, Pleiades, Mars, Hyades.

M. 10:50-10:55 UT 5:50-5:55 a.m. E.S.T. FL: outside lanai twl ne; 18X50 15b

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.

18X50 15b: 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 S:T5 (1/p some haze + cloud) ne; 18X50 15b

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

18X50 15b: M42, areas of Orion, M46, M47,

2006

NGC2244, Plaskett's Star, 'Christmas Tree' asterism and SMoon, M35, M36, M37, M38, Pleiades, Hyades, Mars, lunar craters, R Leonis and area, M44 and Mars nearby, M41. (some haze + cloud)

5:28 - 5:50 a.m. E.S.T.
M. 10:28 - 10:50 UT FL: outside lanai S?T4-5 N; twl ne; 18X50 lsb 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.

18X50 lsb: IC4665, Taurus Pontiowski asterism, the triangle containing ζ Ser, RS Oph 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.

RS Oph (mag. 8.5)

Comet C/2006 A1 (Pojmanski) (6)

S.-M. Mar. 5-6 05:00 - 05:40 UT S(?)T4-5 (I/p; fqul; haze some a) 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.

5:21 - 5:52 a.m. E.S.T.
M. 10:21 - 10:52 UT FL: outside lanai S(?)T 4 (I/p; haze) ne; 18X50 lsb ne: brilliant Venus in the E.; Jupiter very high in the

2006 SE.

18X50LSb: Crescent of Venus, Jupiter and two of its moons, M4; starhopping to RS Oph: α Her, α Oph, IC4665 and γ Oph, the "Taurus Poatiowski" asterism, the triangle of stars containing ξ 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.: 20h 38m; Dec. +6.0° (On Chart 84 of Uranometria 2000.0, the location is about 1½° 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.

RS Oph = mag. 8.5

Comet C/2006 A1 (Pojmanski) (?)

M-T. Mar. 6-7 03:10-03:45 UT FL: la SBT 2-5 variable (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, NGC2244 and nearby Plaskett's Star, "Christmas Tree" asterism and S Mon, M46 (faint) and M47, M44 and Saturn nearby, R Leonis and area,

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; 18X50sb

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

18X50sb: Venus, Jupiter, M4 in Scorpius seen faintly, 2 Oph, IC4665 and β Oph, the "Taurus Poniatowski" asterism, the triangle of stars containing ξ Ser, γ Oph RS Oph 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 κ 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 ε S(?)T5 (l/p; gml) ne; 18X50sb

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.

18X50sb: M42 and other areas of Orion, M41, M46 (seen faintly) and M47, NGC 2244, Plaskett's Star, 'Christmas Tree' asterism and S Mon, M44 and Saturn, Regulus and area, Hyades and Mars, Pleiades, lunar craters on the 8-day-old moon.

5:22-5:50a.m.E.S.T.
M. 10:22-10:50 UT FL: outside lanai (S?T6 (l/p); twl ne; 18X50sb

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.

2006 18X50156: Venus; Jupiter and 3 of its moons; 2 Her, α Oph, IC4665, β Oph, "Taurus Poutiowski" asterism, area of Barnard's Star with probable glimpses of the star itself, the triangle of stars including 5 Ser, Y 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 1½ degrees ENE of Kappa Del. I estimated the mag. to be 6.8. I was almost certain of seeing a faint tail extending upward 1¼° to the star ½° E of 51 Del. ~~(I estimated the mag. as 6.8)~~ (For position, see Chart 84 of the Uranometria 2000.0 OSA.). I also observed M4 in Scorpius.

RS Oph (mag. 8.6)

Comet C/2006 A1 (Pojmanski) (9)

W.-Th. Mar. 8-9 03:10-03:50 UT FL: las? T4-5 (1/p; 9ml; clouds that left) ne; 18X50156 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. ~~Mars~~ Saturn 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.

18X50156: M42 and some areas of Orion, M41, M46 seen faintly and M47, NGC2244, 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.

M 10:28 - 10:48 UT FL: Outside lanai twl; some cloud ne; 18X50156 ne: At the beginning of astronomical twilight and with some moving clouds in the E. sky,

5:28 - 5:48 a.m. E.S.T.

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 Ser, α Oph, IC4665 and β Oph, γ Oph, the area of Barnard's Star, the "Taurus Pontiowski" asterism, the triangle of stars containing ξ 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 - 5:55 p.m. E.S.T.

M. 10:20-10:55 UT FL: outside lanai S?T1(cloud); tul ne; 18X50sb 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

2006

"Taurus Poatiowski asterism", the triangle of stars containing $ Ser, Y 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.

RS Oph (mag. 8.7)

F.-S. Mar. 10-11 03:10-03:50 UT FL: la S:T 3-5 (1/p; some cloud; gml; ^) 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. Arcturus and Spica ^

18x50sb: M42 and other areas of Orion, M41, M46 seen faintly and M47, NGC2244, Plaskett's Star, the 'Christmas Tree' asterism and S Mon, M36, Hyades, Mars, Saturn, R Leonis and area, lunar craters.

M. 10:23-10:45 UT (5:23 - 5:45 a.m. EST) FL: outside lanai S:T 6; twl ne; 18x50sb

ne: Summer Tringle in the NE, brilliant Venus in the E, Jupiter very high in the SE.

18x50sb: Venus, Jupiter and 3 of its moons, M44, Otter, α Oph, IC4665 and β Oph, Y Oph, the "Taurus Poatiowski" asterism with nearby area of Barnard's Star and probably briefly and faintly the star itself, the triangle of stars containing $ Ser, Y 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.: 20h 55.9m; Dec.: 18° 08' (about ½° NNE of the variable star X 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; gm l; 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 Pontiowski" asterism and the triangle of stars containing ξ Ser and μ Oph (~~almost certainly~~ perhaps), but it was too bright to see the ~~co~~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 gm l) ne
- 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

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 Ser, α Oph, IC4665, β Oph, γ Oph, area of Barnard's Star, the "Taurus Porrowski" asterism, the triangle of stars containing 5 Ser, Y 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: 21h 04.0m; Dec.: +22° 36' about 1½° ENE of the star 33 ~~Del~~ Vul (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.

RS Oph (mag. 8.5??)

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

M-T. Mar. 13-14 03:15-04:05 UT FL: 14.5" T45 (1/p; ~~full~~ some cloud); N ne; 18X50ISb

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°

2006

2006

E. of Saturn; the moon was about 12° E of Regulus. Mars and Aldebaran were about 10° apart, low in the W. sky.

18X50lsb: 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 20 hours from being precisely full.

M. 10:20-10:45 UT FL: outside Laaaai twl; fml ne; 18X50lsb 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.

18X50lsb: Venus; Jupiter and at least 1 of its moons; α Her, α Oph, IC4665, β Oph, γ Oph, the "Taurus Poutiowski" asterism, the triangle of stars containing ζ 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 21h 06m; Dec.: +25° (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 5? 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

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(!/p; cloud); tel ne; 18x50lsb

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 amid or through the clouds about 25° above the W. horizon. In the NE Vega and Altair could also be seen at times.

18x50lsb: I observed Venus, Jupiter, ε Lyrae, the bright stars of Delphinus, the "Taurus Pontiowski" asterism in Ophiuchus and the triangle of stars containing ζ 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(!/p; gml; some haze) ne; 18x50lsb

ne: Saturn near the zenith, very bright moon only about 1 day after Full Moon ~~well~~ 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.

18x50lsb: 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(!/p; gml) ne; 18x50lsb

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

Clouds
- Fog - seeing and the ground

Relative Sunspot Numbers

Date: 2005	My Observation
Aug. 22	54
23	52
24	29
25	64
26	49
27	58
28	54
29	54
Sept. 1	11
2	16
3	11
4	12
6	12
7	11
9	47
10	55
11	62
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
21	0
30	0
Nov. 2	0
7	0
11	0
14	32
23	29
25	12