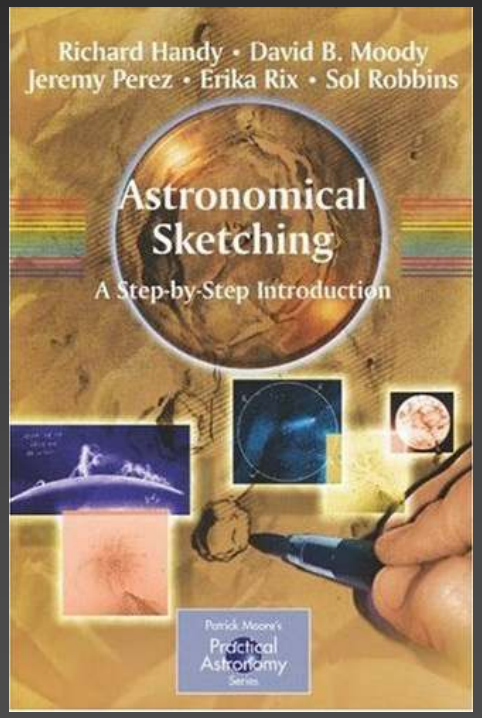
Astronomical Sketching

by Erika Rix



Erika Rix

Contemplating Sketching?

Benefits of sketching at the eyepiece

- Improving visual observing skills, really studying and then remembering object
- Visual record of observation
- Connection, Peacefulness, Relaxation

What's important to you?

Interested?
What's holding you back?

Targets

- Sketching Media
- DSOs, Comets, Asteroids
- The Moon
- Planetary
- The Sun

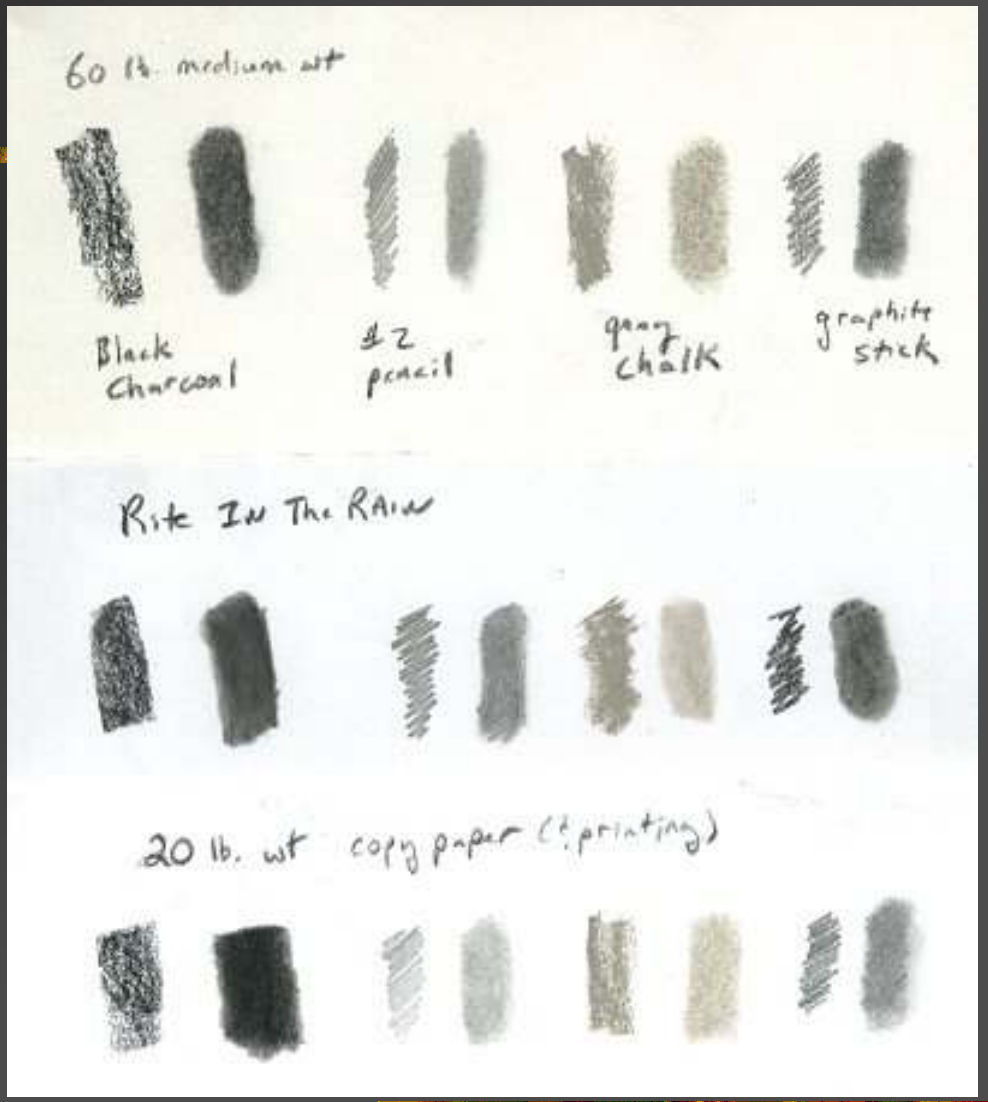
PCW Memorial Observatory

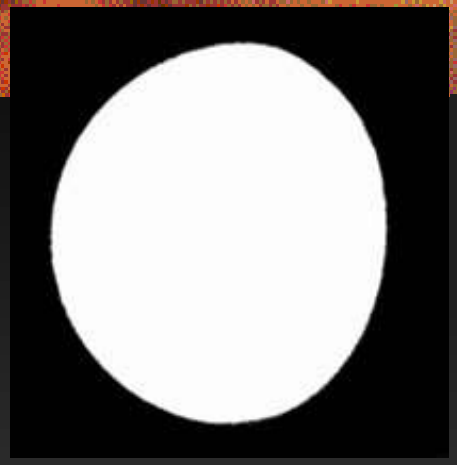
Sketch Media…they're not all the same

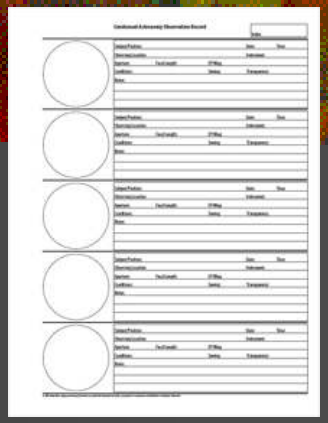
- Various paper
- Pencils, chalks, charcoal, pens….
- Erasers
- Stumps, tortillons, and smudgers
- Sharpeners
- Digital pads and photo-editing software
- Lighting
- Templates
- Supply stores

Comfort is top priority

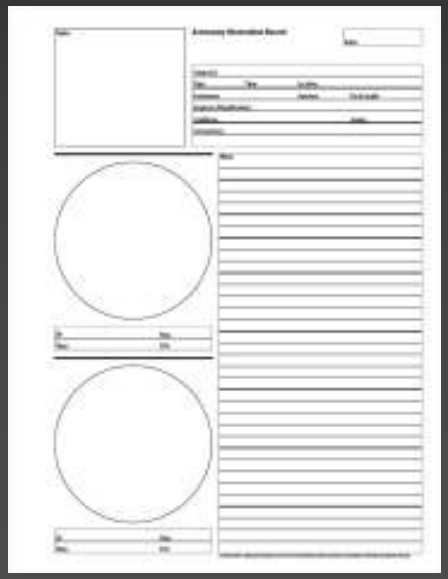
Various Media

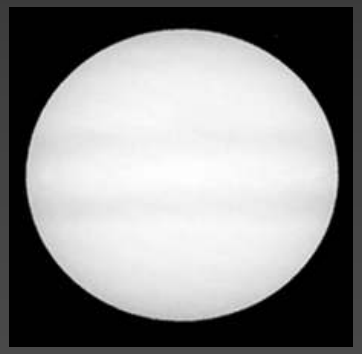


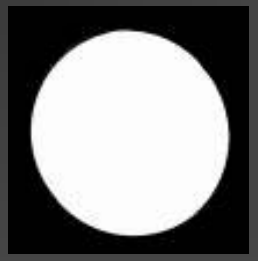




Make use of Templates







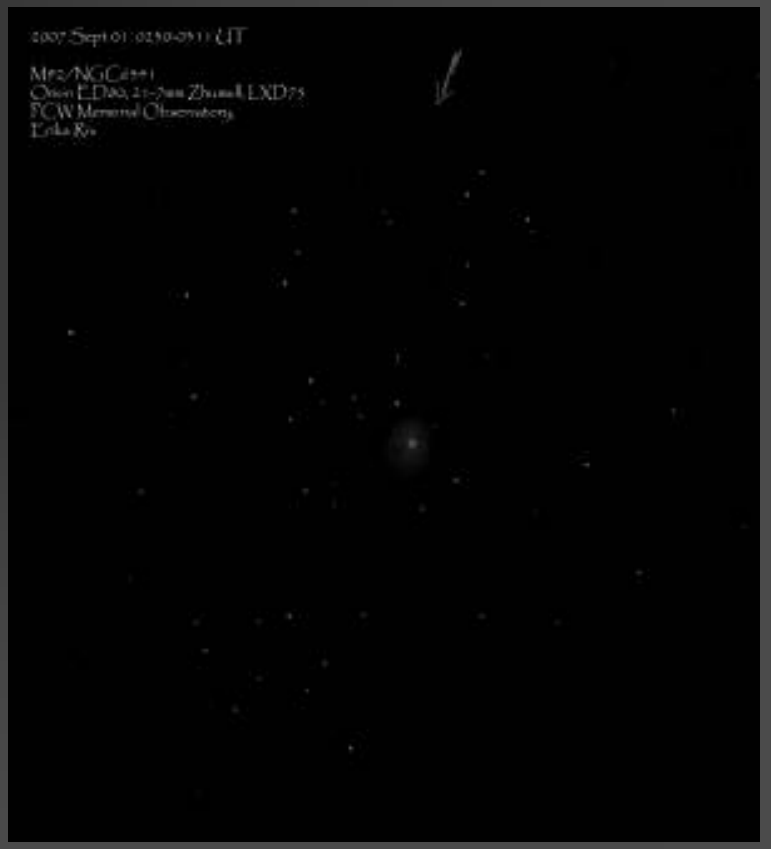
Saves Time

Accuracy

Tidiness

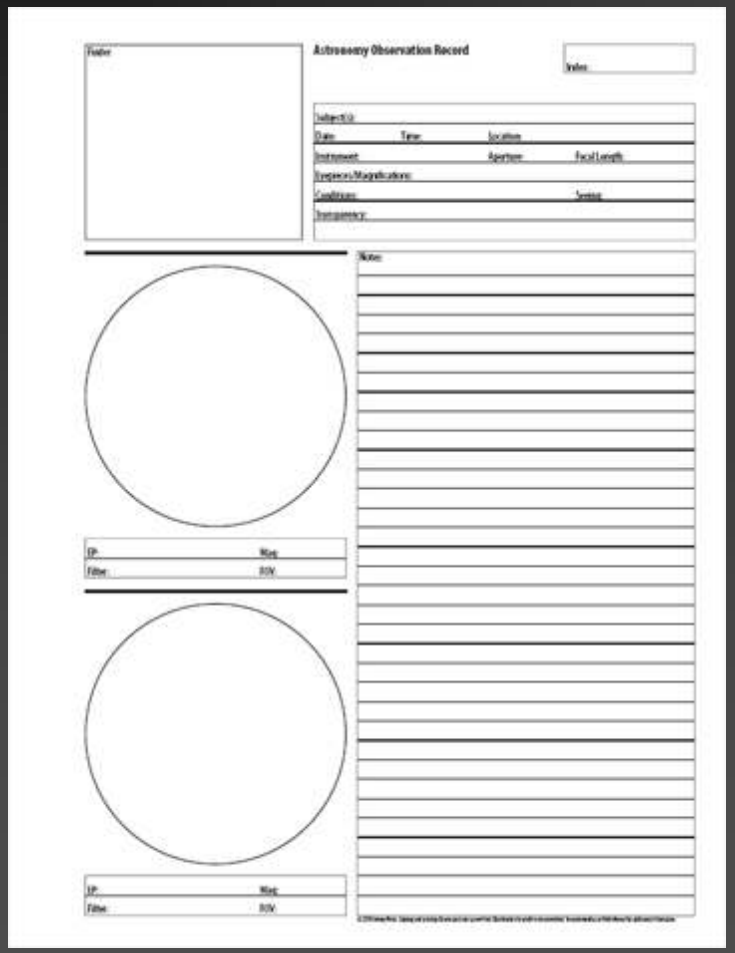
Star Fields and Smudges

- Anchors
- Study object
- Lay target foundation
- Finish star field
- Study again
- Add finishing details
- Take notes



Erika Rix

Prepare template



Open fields verses templates

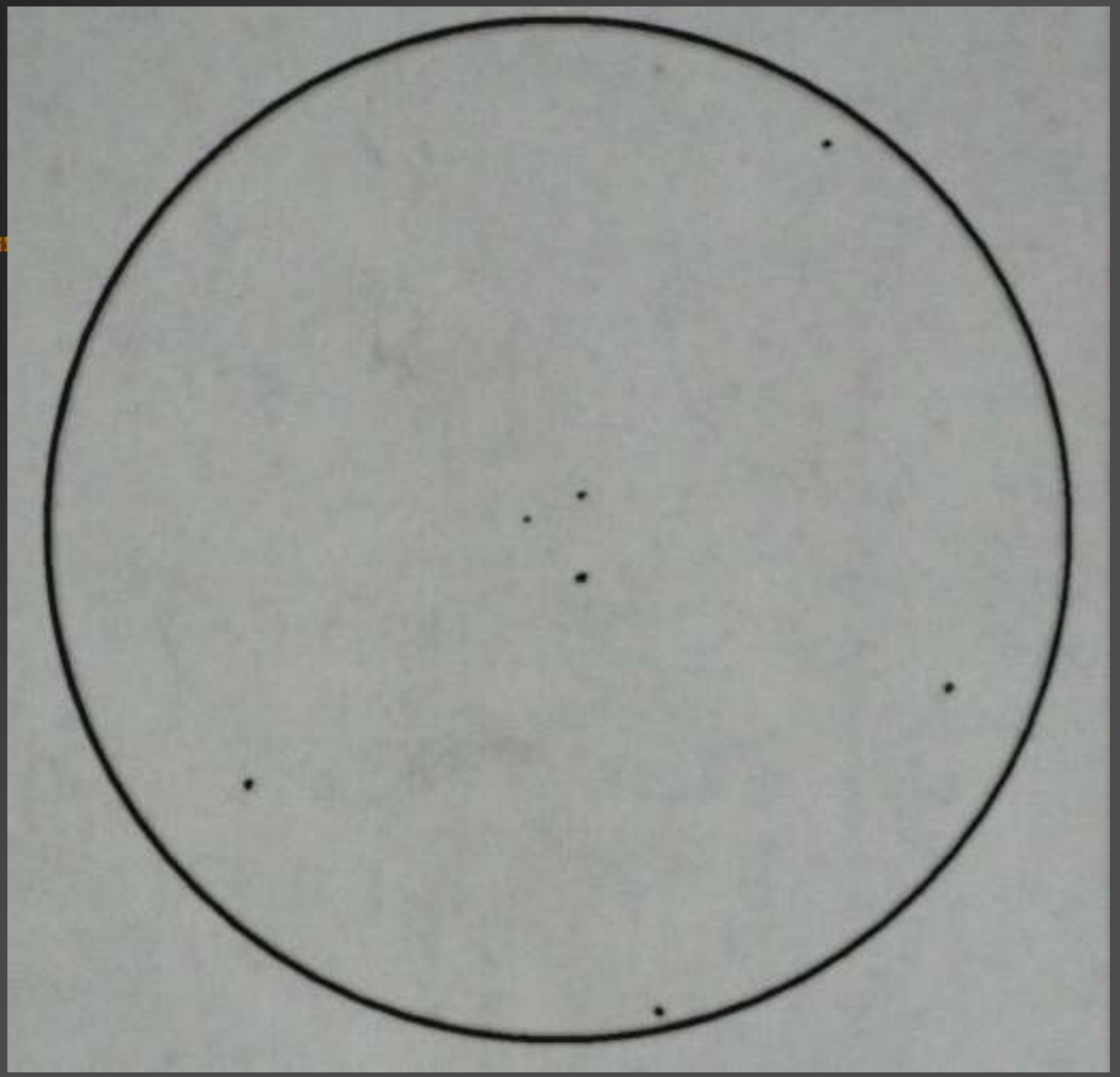
Template by Jeremy Perez
Perez Media

Collinder-399
20070929

Anchor stars Triangulate

White copy paper
Fine point black felt pen
2 pencil

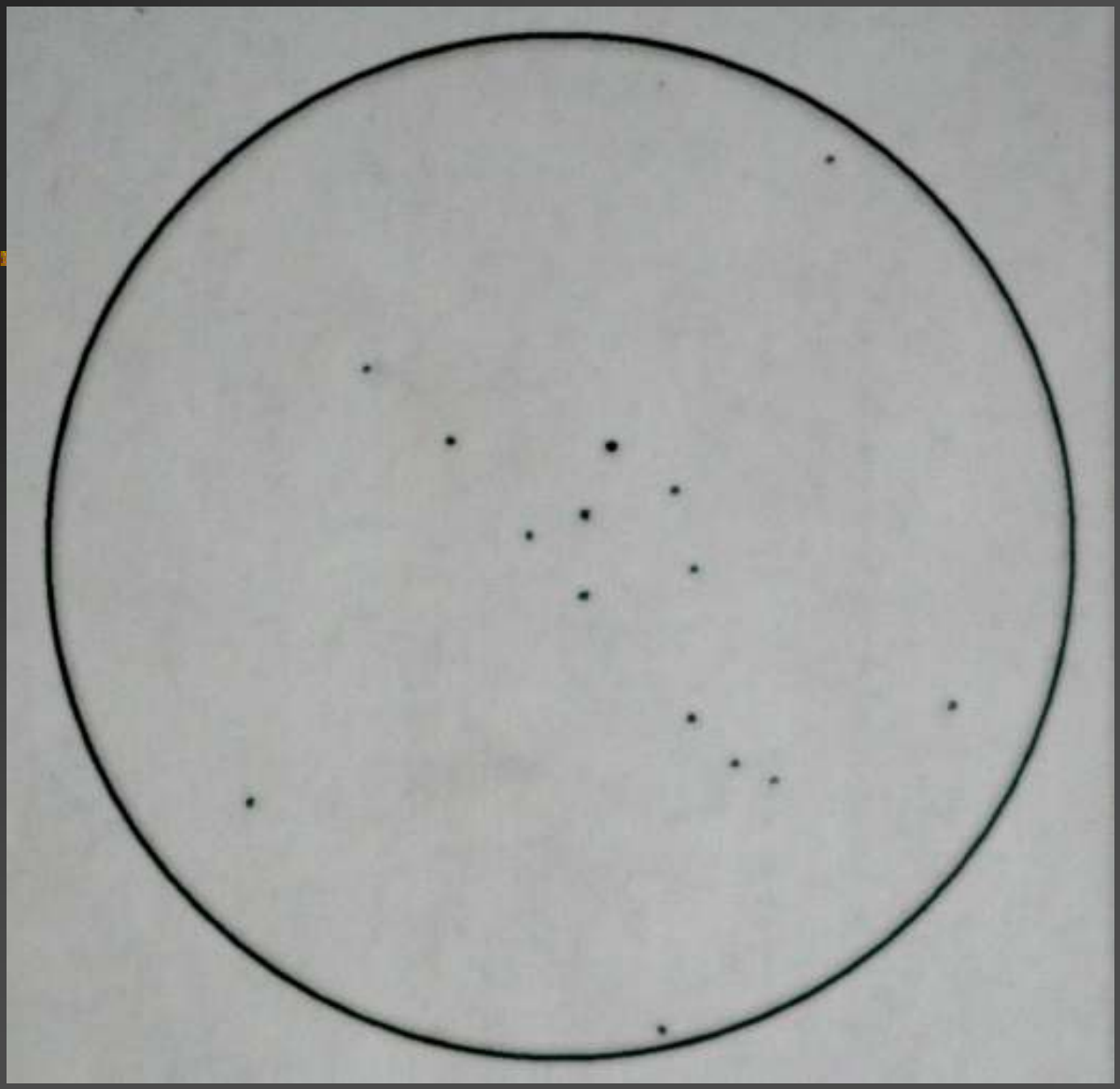
Remember to think in the negative.



Collinder-399
20070929

Main pattern

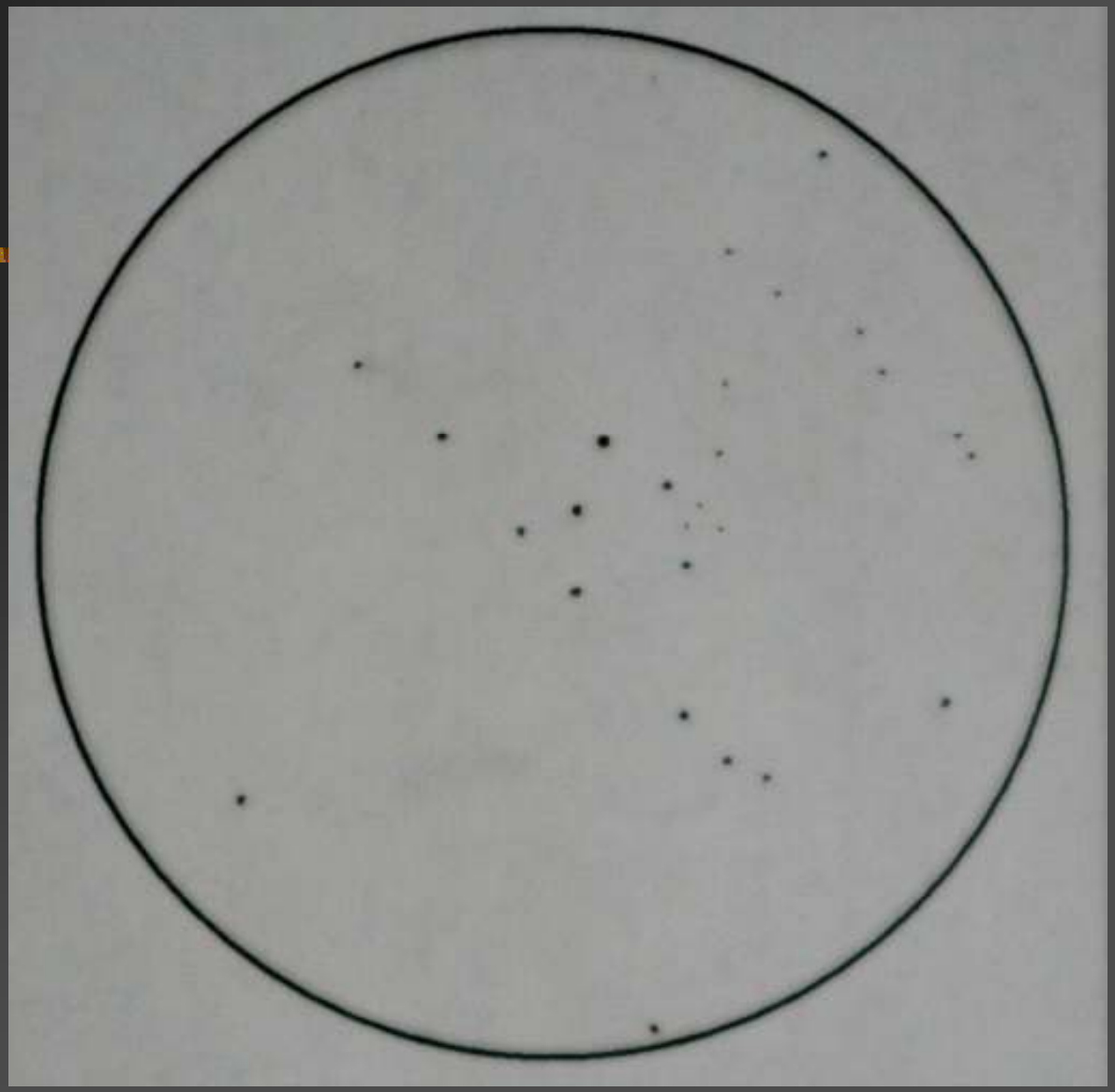
.5 mm mechanical pencil
2 pencil



Collinder-399
20070929

Work in wedges

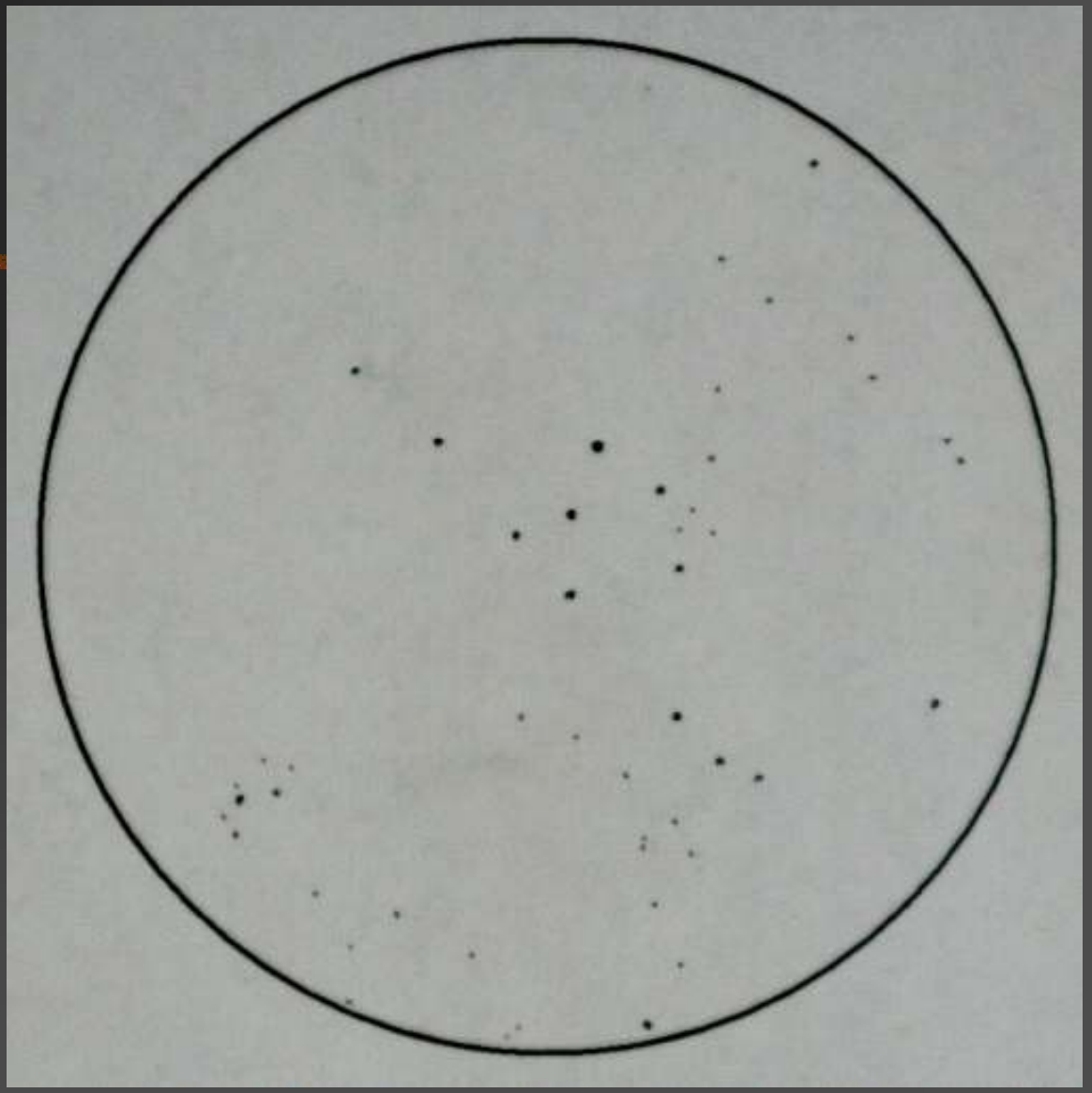
.5 mm mechanical pencil
.3 mm mechanical pencil



Collinder-399
20070929

Work in wedges

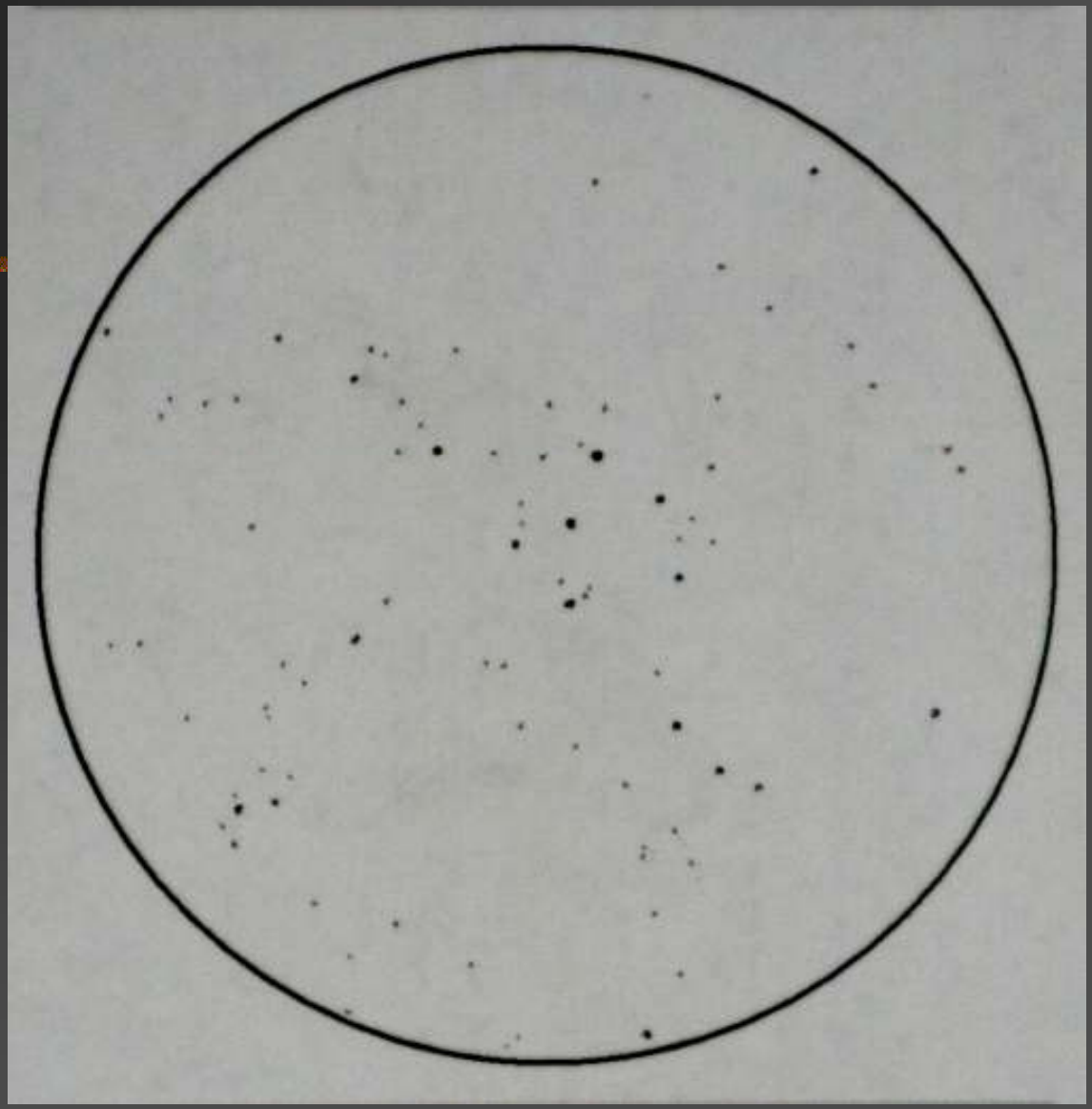
.5 mm mechanical pencil
.3 mm mechanical pencil



Collinder-399
20070929

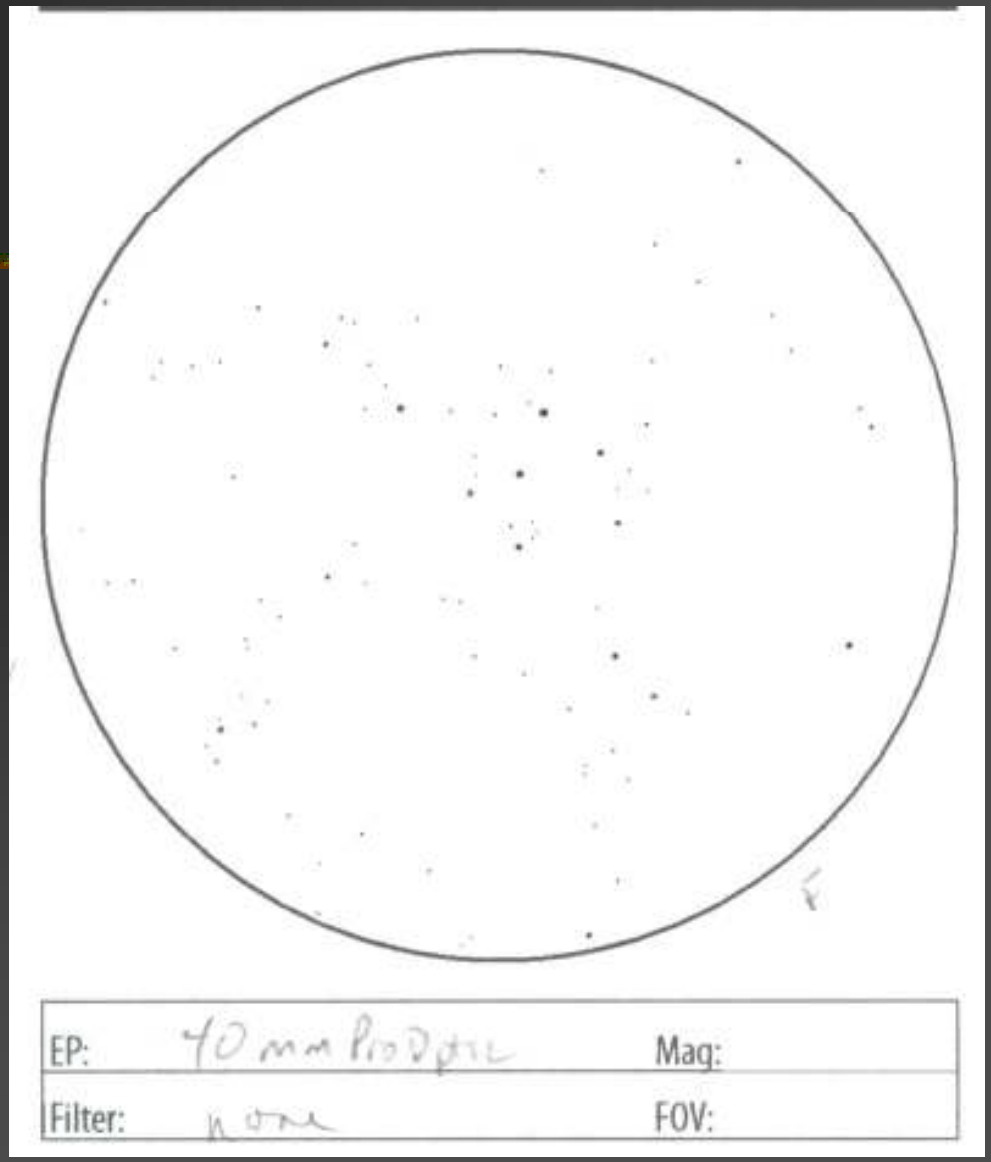
Work in wedges

.5 mm mechanical pencil
.3 mm mechanical pencil



Collinder-399
20070929

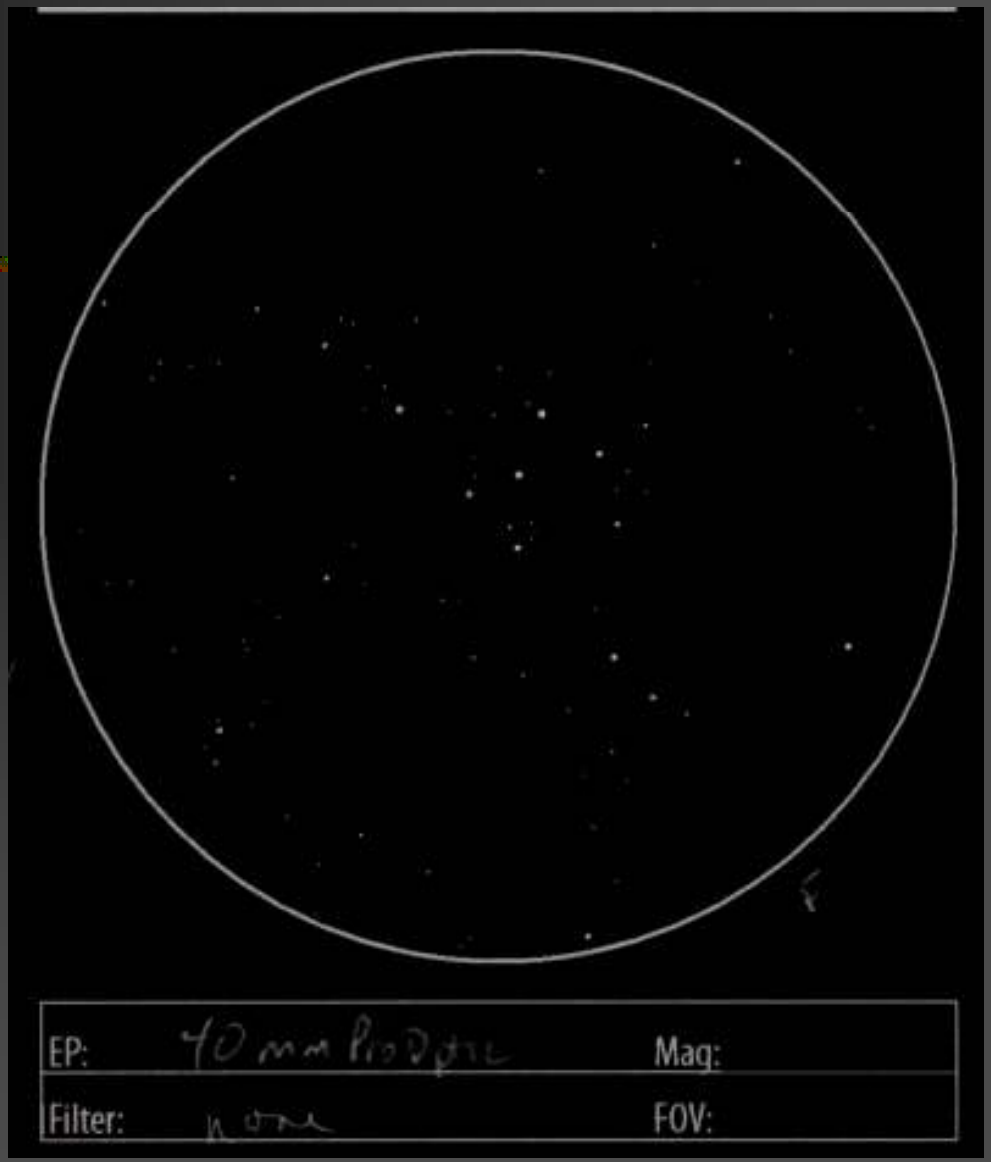
Scan and
clean up



Collinder-399
20070929 0100-0146 UT

Invert

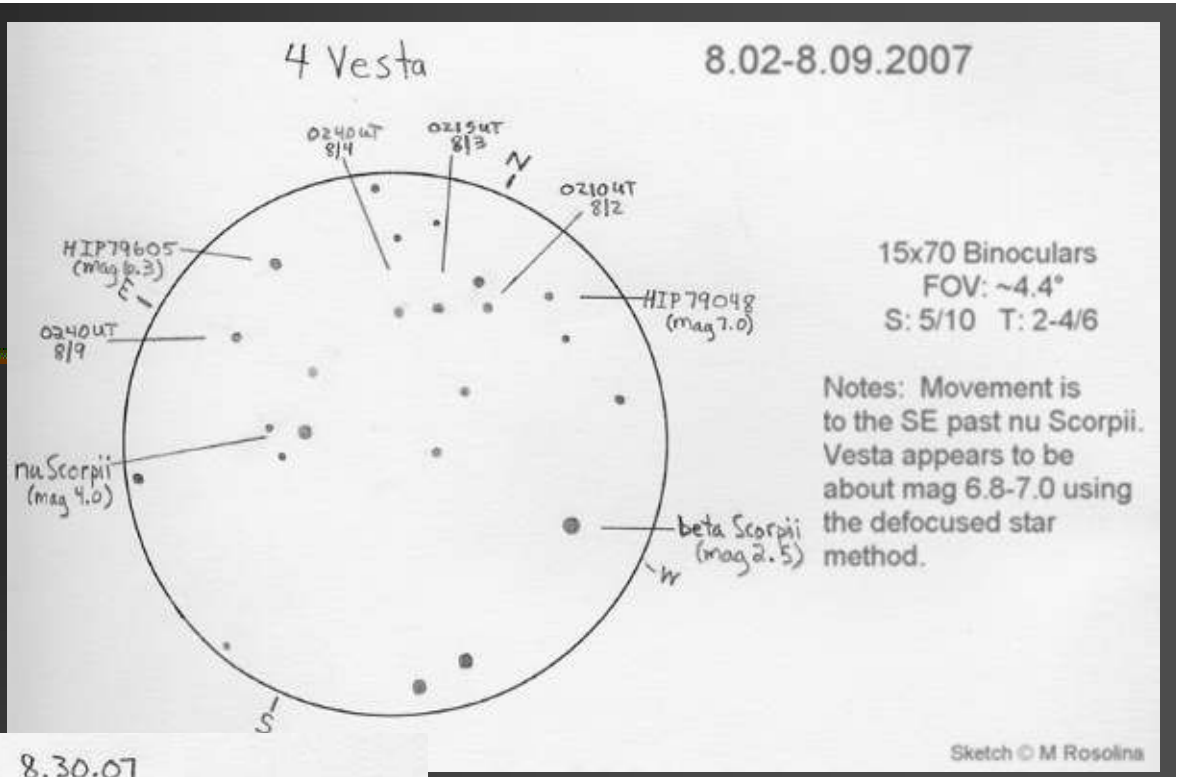
Orion ED80, LXD 75, 40mm Pro Optic eyepiece, moonlight ended session.

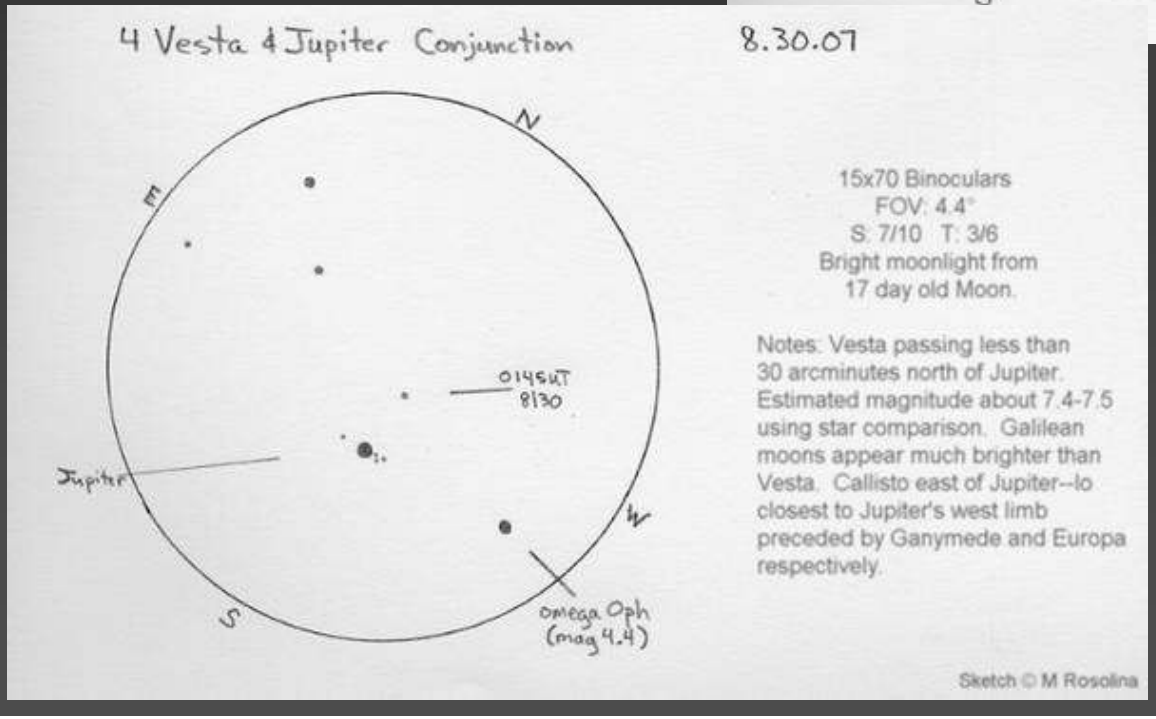


Faint Fuzzies

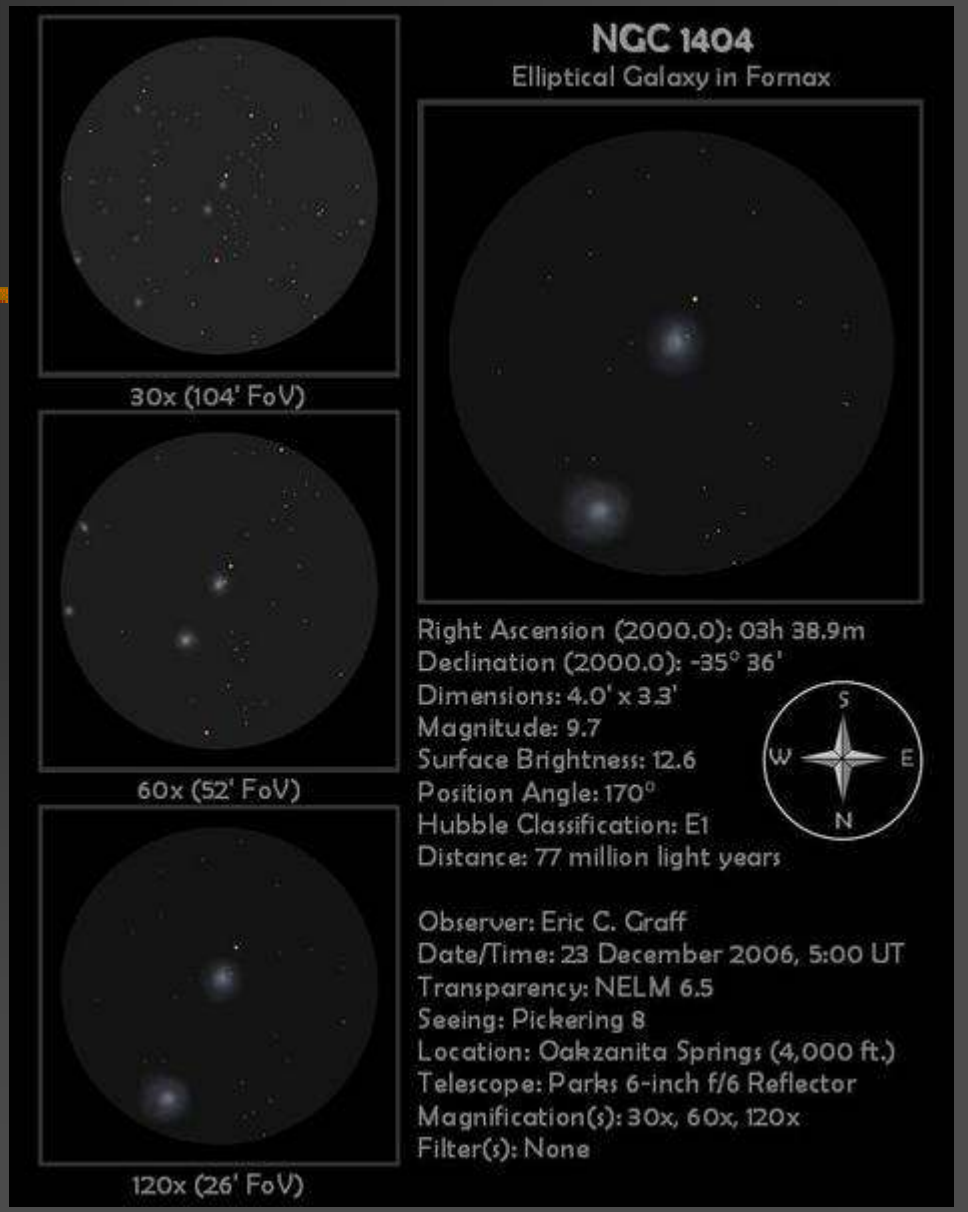
You can easily add soft celestial bodies with a loaded blended stump.

4 Vesta tracking
by Michael Rosolina





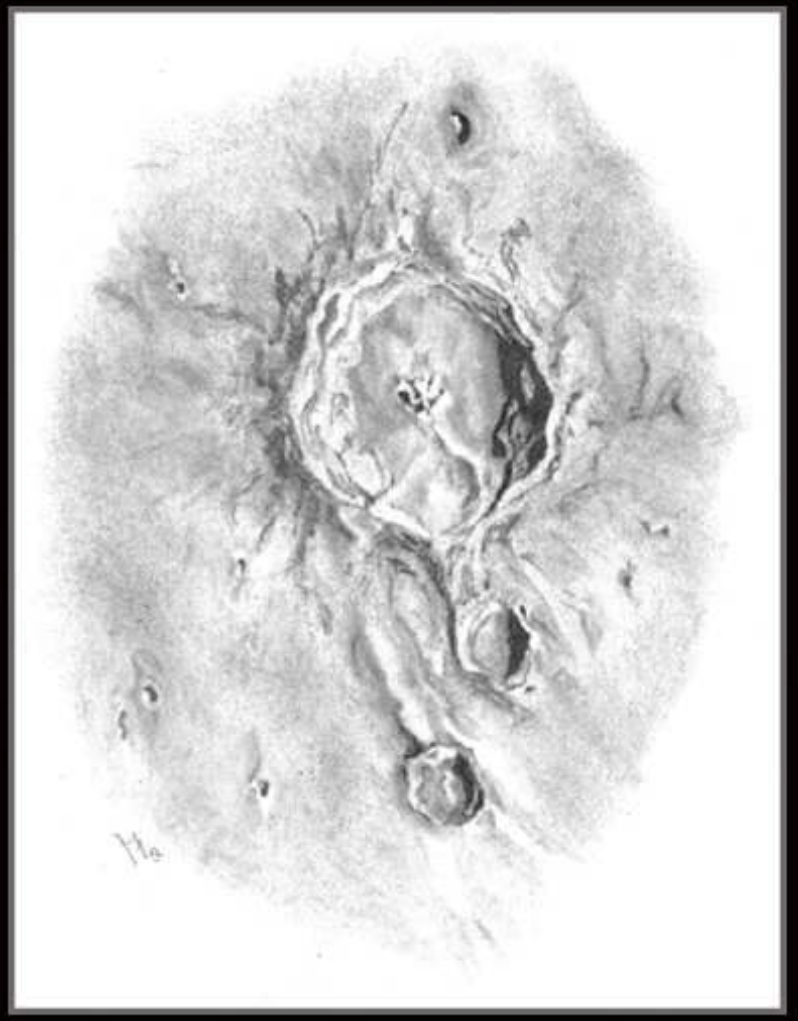
NGC1404 & S 634/ADS 8444
by Eric Graff



The Moon

- Choose your target
- Easier to sketch away from terminator
- Lay anchor
- Add shadows
- Lay background foundation
- Work in layers
- Retouches
- Take notes

May 17, 2005
ETX70 AT



November 12, 2005
10" LX200

Erika Rix

Copernicus
20061002

Complex Crater near Terminator

Anchor

White Rite in the Rain paper
8x11.5”
Charcoal stick with holder

Copernicus
20061002

Add shadows

Stick of charcoal

The terminator moves quickly, so add the shadows near the beginning stages of your observations.

Copernicus
20061002

Blend shadows

Small blending stump

Most shadows have a smooth appearance.

Copernicus
20061002

Additional shadows added

Charcoal stick with holder

Copernicus
20061002

Additional shadows added and blended

All with a blending stump.

Loaded blending stumps are very useful in adding softer features such as nebulae and features on Mars and crater floors.

Copernicus
20061002

Lay background foundation

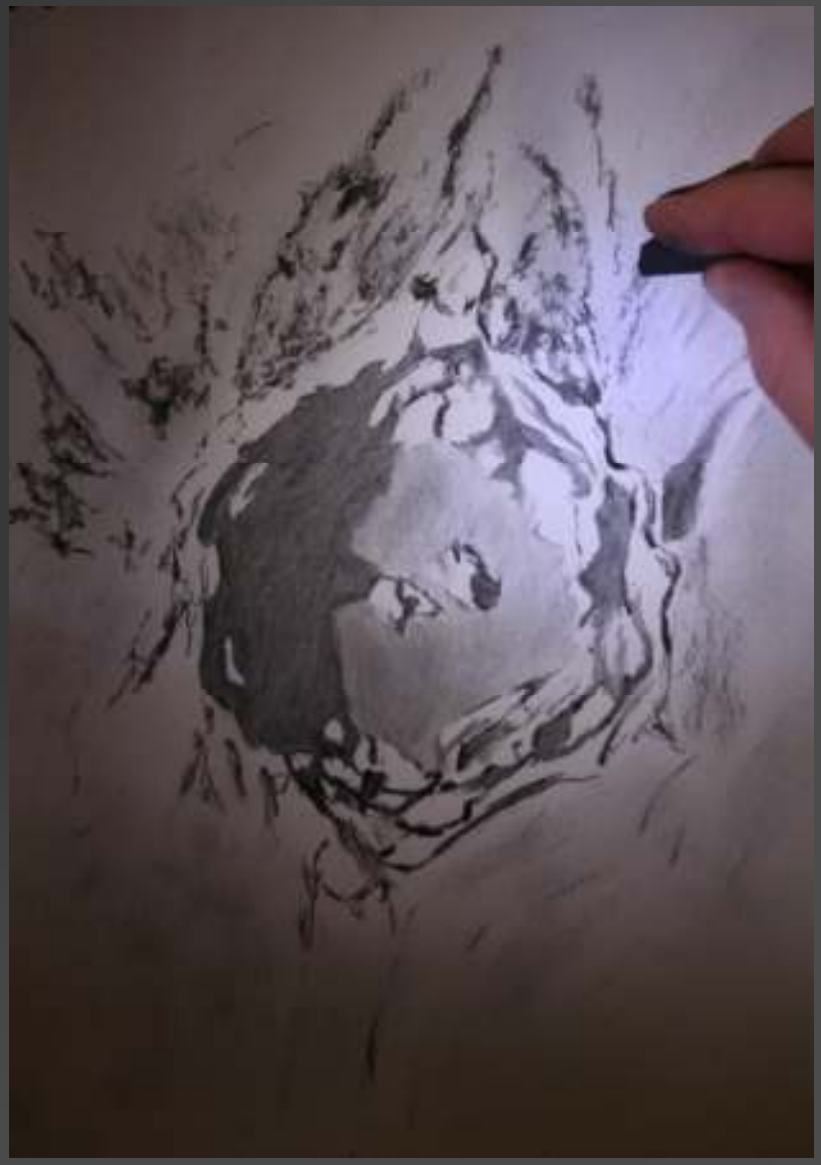
Loaded finger

Loaded fingers add soft backgrounds in layers. With the correct paper, this can also be useful for rendering grainy textures. Blending stumps produce a smoother texture.

Copernicus
20061002

Additional detail layers

Stick of charcoal



Copernicus
20061002

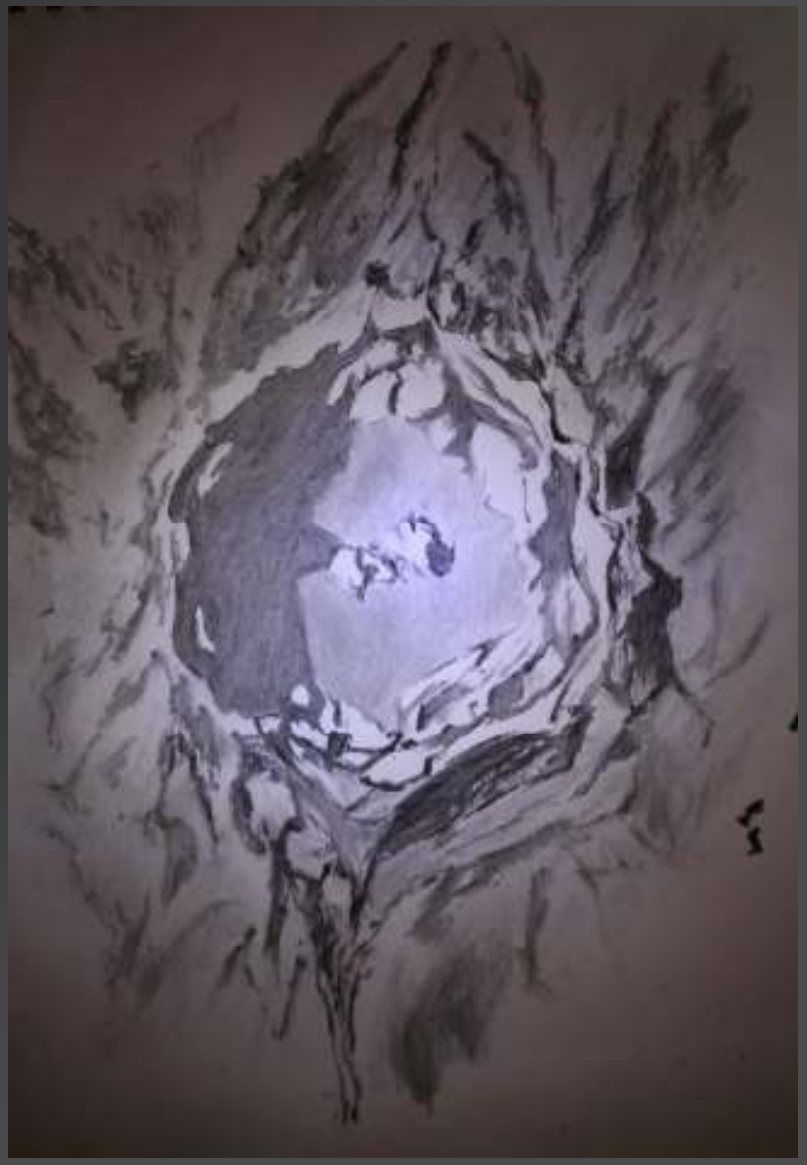
Additional detail layers

Stick of charcoal

Copernicus
20061002

Soften detail layers

Blending stump and fingertips



Copernicus
20061002 0045-0200 UT

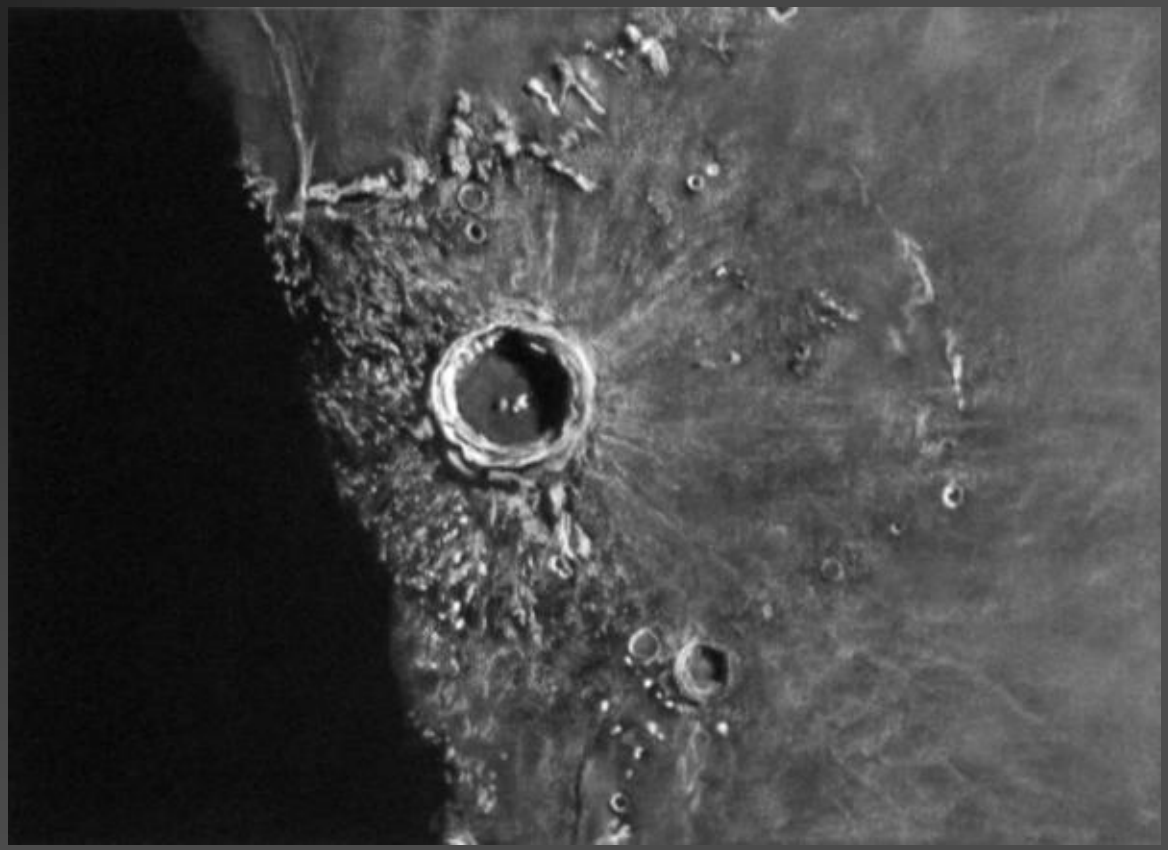
Add finishing touches

LX200, 12mm Burgess,
WO Binoviewers

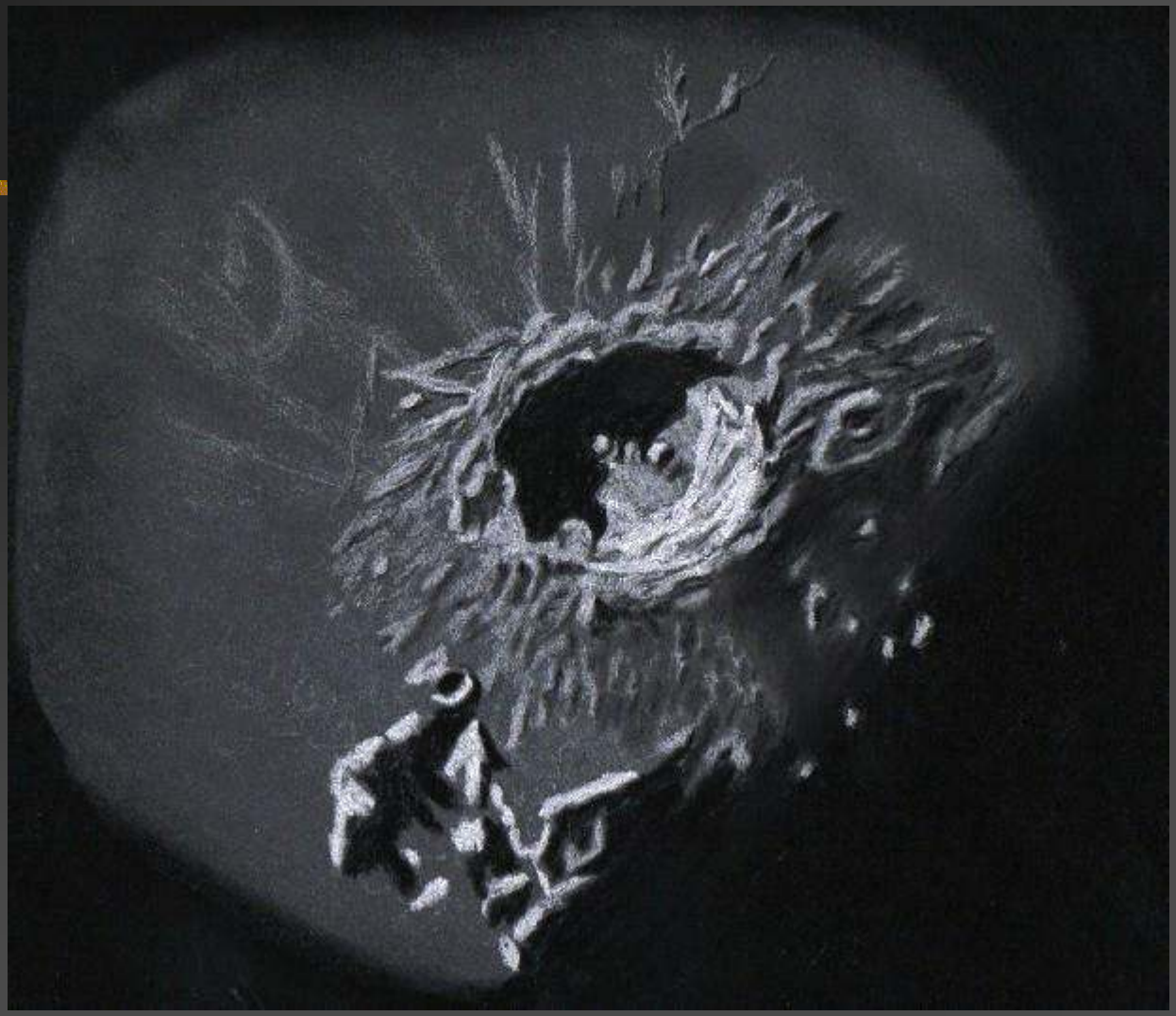
Copernicus
by Rich Handy

Copernicus, Reinhold and the Montes Carpatus at lunar sunset.

Date: 8-28-05
Start- 4:15 am End: 5:40am PDT
Scope: 12" Meade SCT
Eyepiece: 40mm Plossl
Barlow: 2X Televue
Magnification: 152X
Seeing: 7-9 of 10
Transparency: 9 of 10
Medium: White Conte' Crayon on black textured Strathmore paper.
Size: 17.5" x 23.5"



Copernicus *by Thomas McCague*

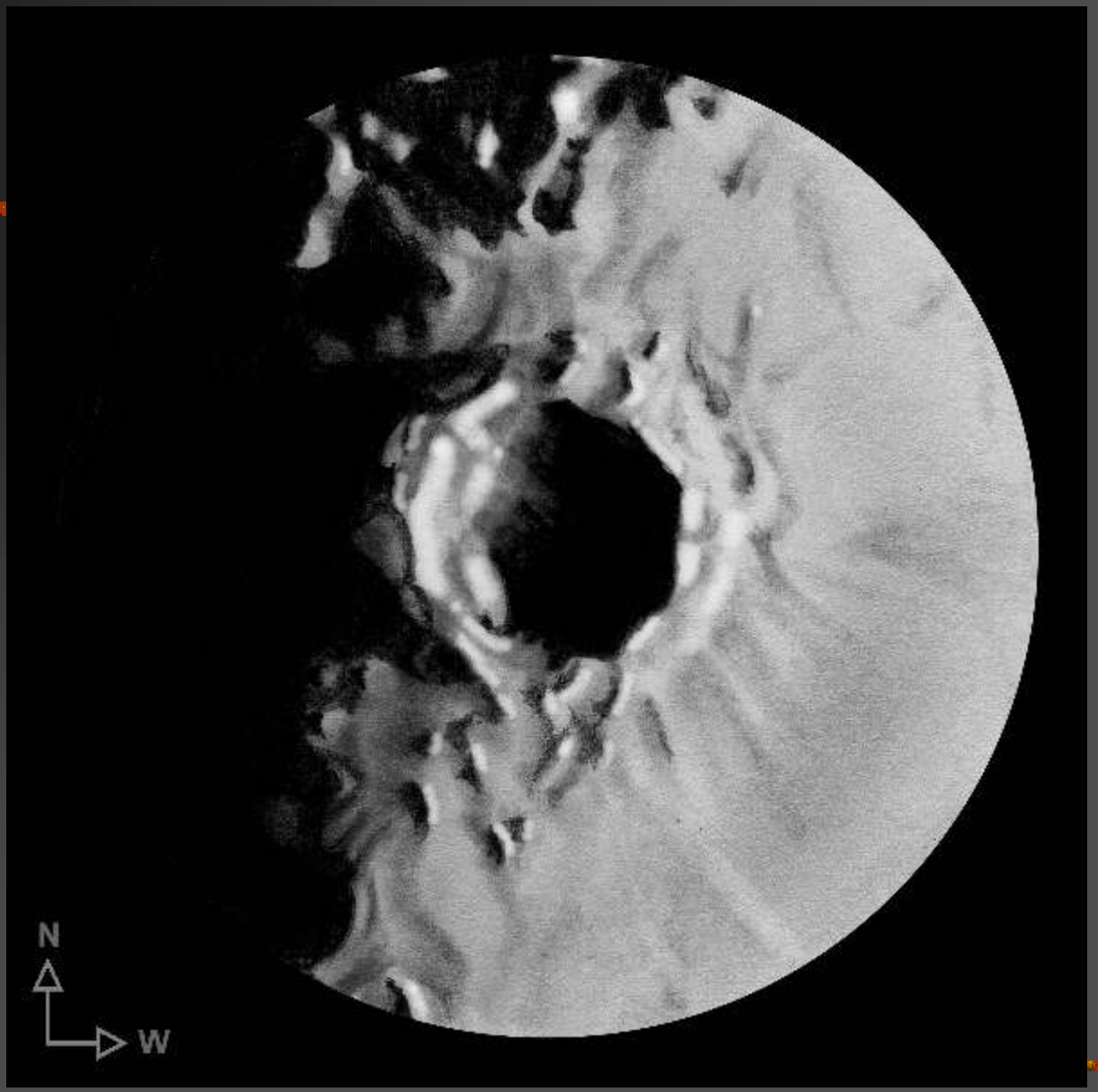


Black Strathmore 400 Artagain paper, 9”x 12”, white and black Conte’pastel pencils and a blending stump. Brightness was slightly decreased and contrast increased after scanning using Microsoft Office Picture Manager.

Telescope: 10 inch f/5.7 Dobsonian and 6mm eyepiece 241x
Date: 2-16-2008 8:45 - 10:50 UT (actual sketching time was 60min.)
Temperature: -10°C (14°F) clear, calm
Seeing: Antoniadi III
Co longitude: 24°
Lunation: 9 days
Illumination: 71.9 %
Phase: 64°

Copernicus
by Eric Graff

Lunar Impact Crater
Parks Astrolight EQ6 • 6" f/6 Newtonian Reflector
7.5mm Parks Gold Series Plössl + 2x Barlow • 240x
Field of View Not to Scale
21 September 2007 • 03:05-04:15 UT

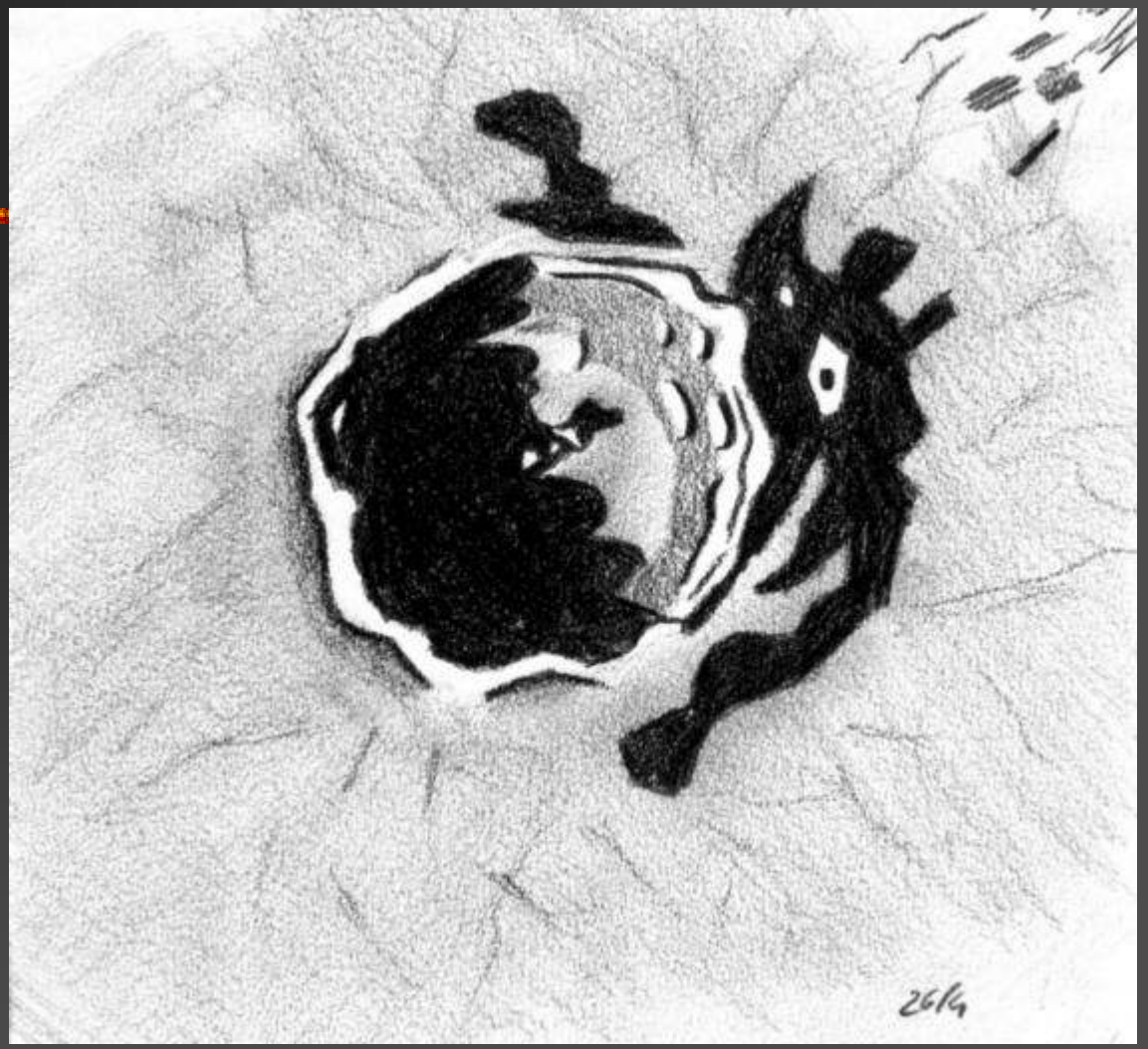


Copernicus
by Kris Smet

Belgium

2007 04 26

8" dob-tube on a Meade 10" Starfinder mount



Full phase
by Erika Rix

2007 01 03
0215-0420UT
Orion ED80, LXD75
20mm Kellner w/diagonal
Lunar Filter

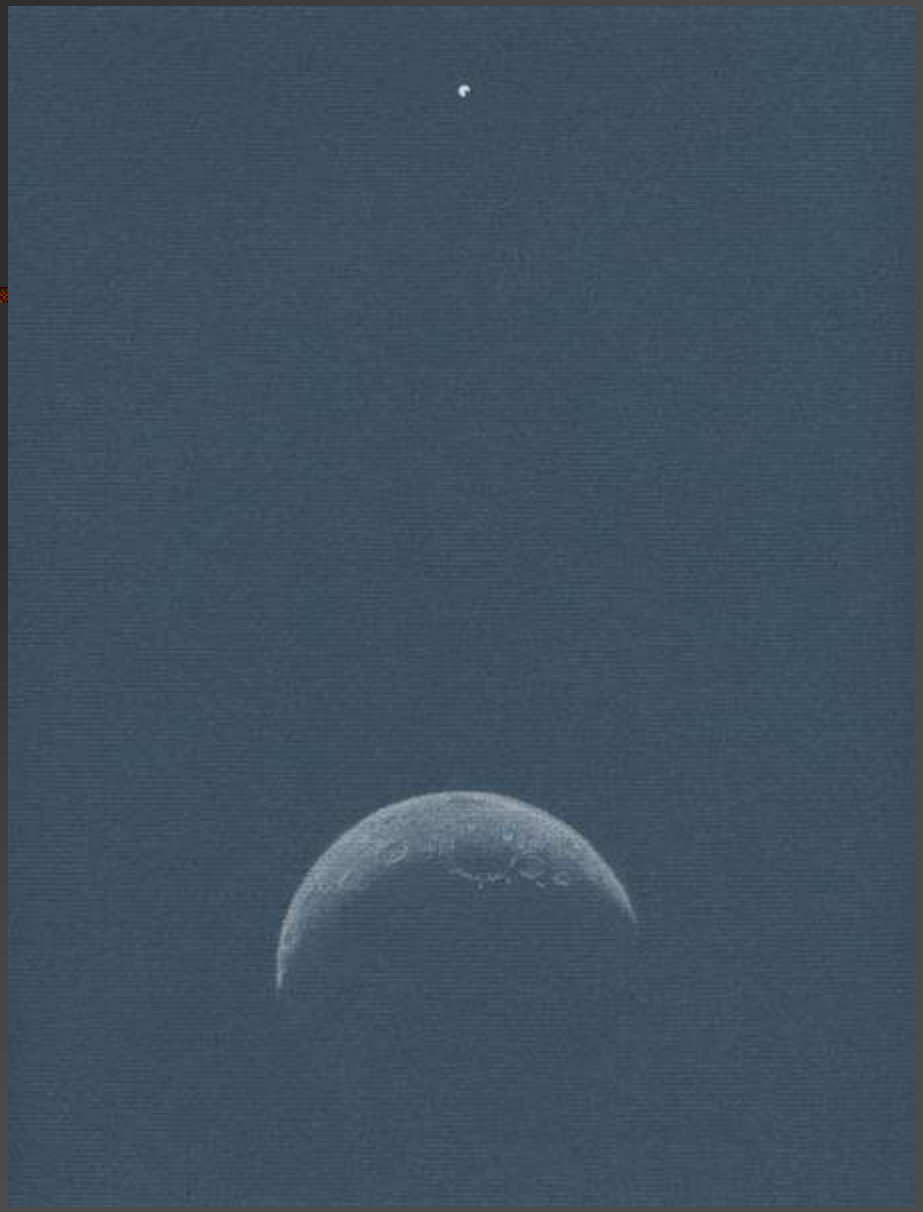
Lunation 1039
Lunar day 13.51
Lumination 99.7
AZ +94deg3'
Alt +52deg28'
T: 3/6, S: A III
Temp: 30f/-1C
Humidity: 75%
W: 4mph SSE

Black Strathmore Artagain
White Conte'

Moon & Venus
18 June 2007
by Sally Russell

White pastel, white watercolour pencil & white acrylic on blue 'Daler-Rowney' Ingres paper

Sketch size 8" x 11"



Naked eye eclipse
by Carlos Hernandez

2008-02-21 Computer generated sketch based on observation

Moon – Saturn
by Sally Russell

England

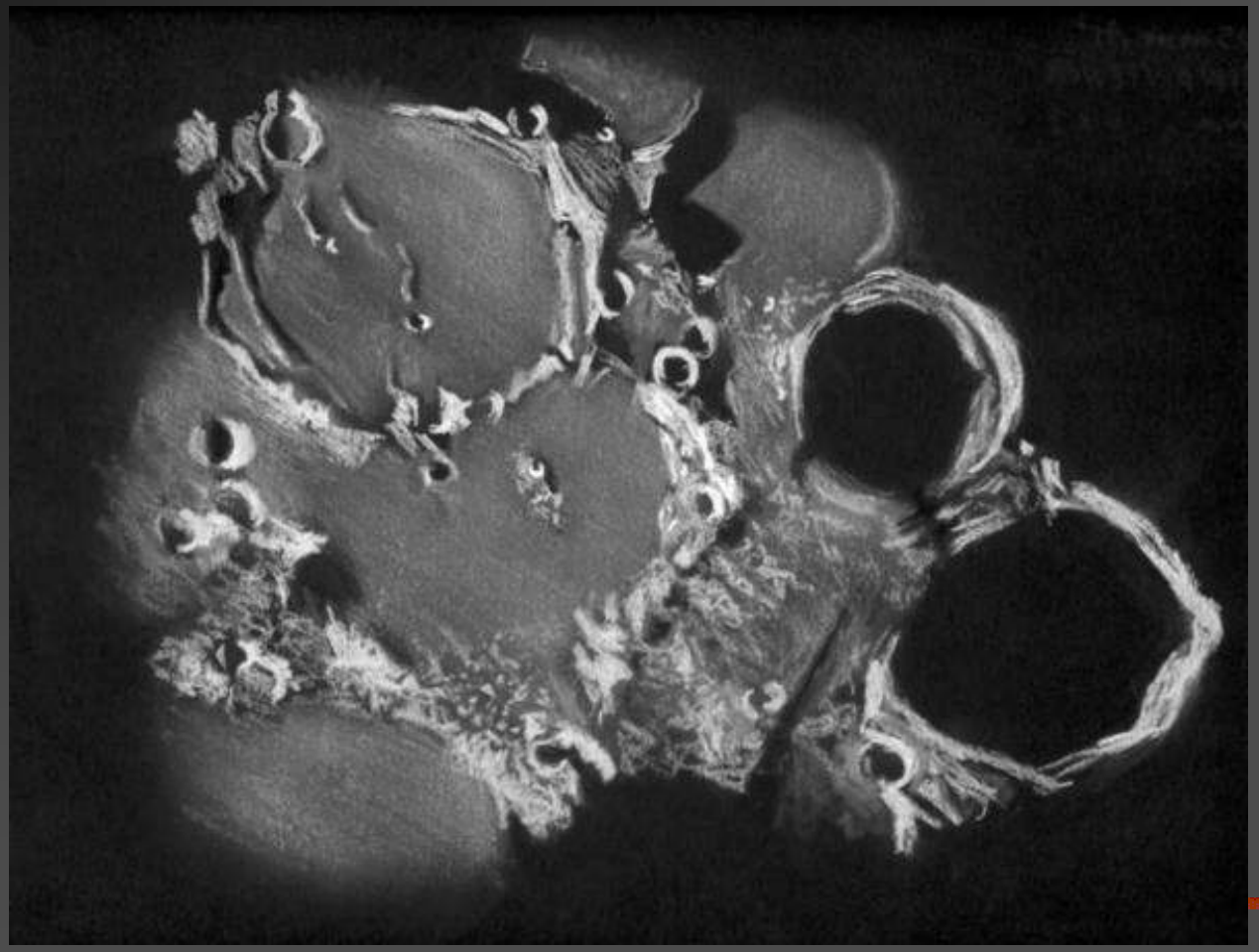
Pastel, pastel pencil and watercolour pencil on black Canford paper, sketch size 6" x 11"

Purbach, Regiomontanus, Blanchinus, Werner & Aliacensis
by Sally Russell

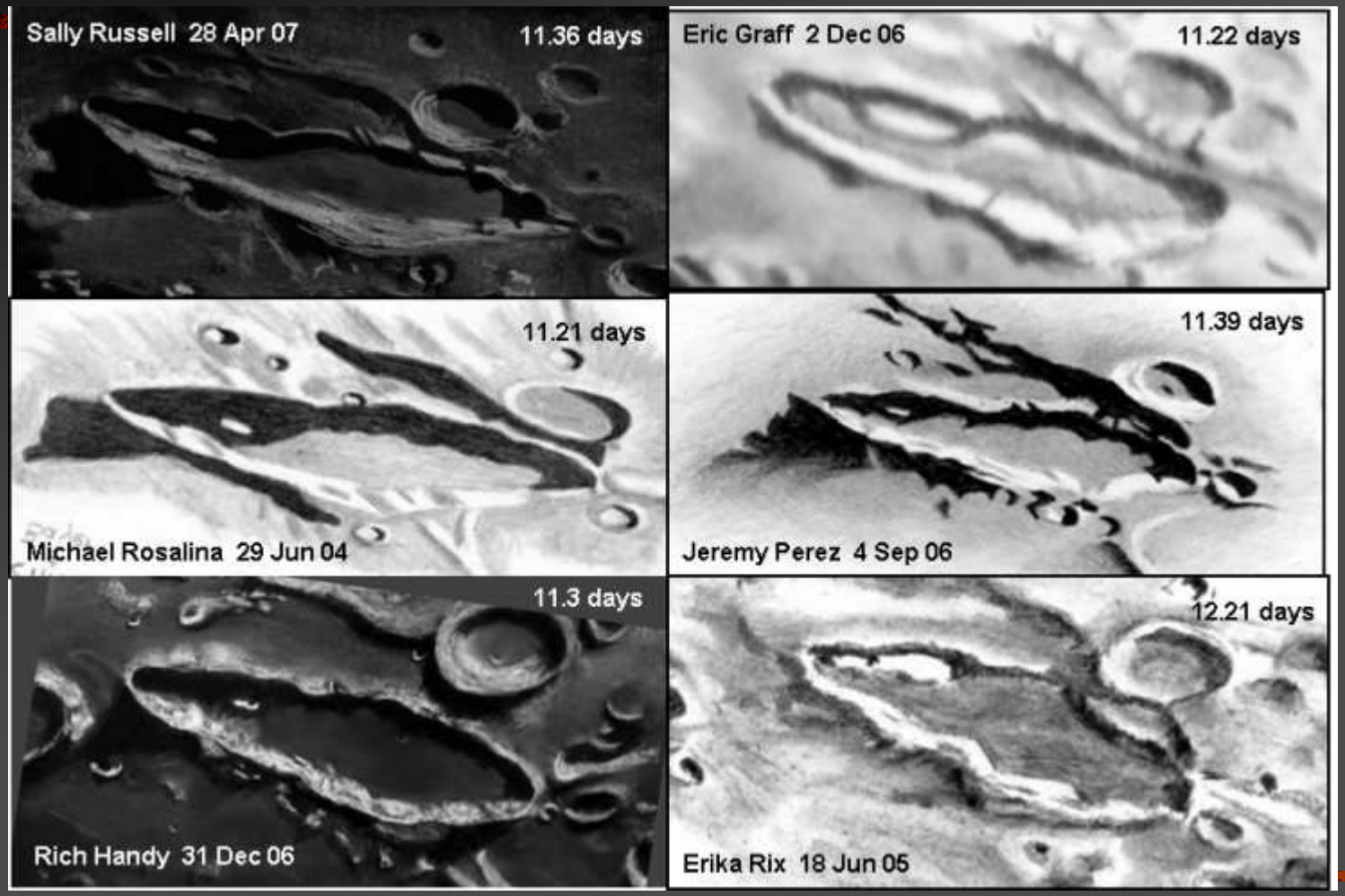
England

12 Dec 2006

White Conte pencil plus white pastel on black 'Canford' paper, sketch size 11" x 8"



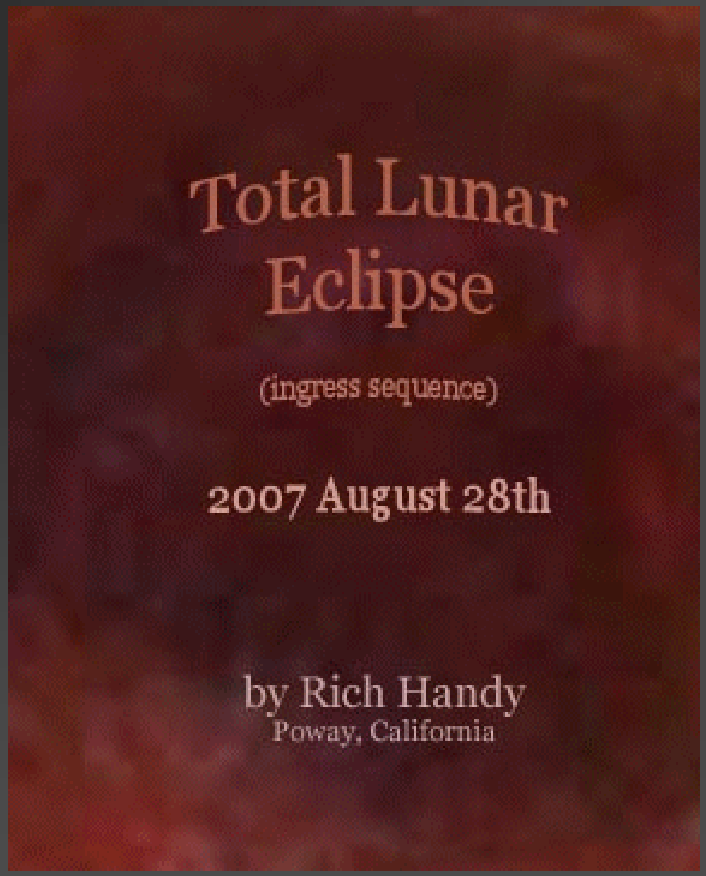
Schiller composite



Eclipse Animation

Sketch sequence by Rich Handy

Animation by Erika Rix



Planets

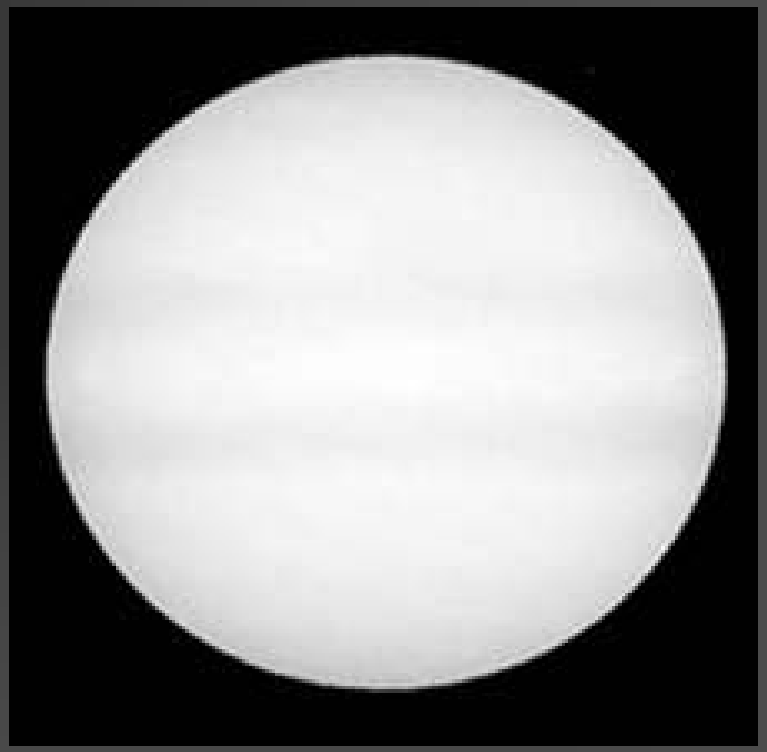
- Templates helpful
- Study first
- Sketch quickly
- Layers
- Take notes

Sol Robbins

Jupiter
20060528

Choose a template or create your elliptical planet outline

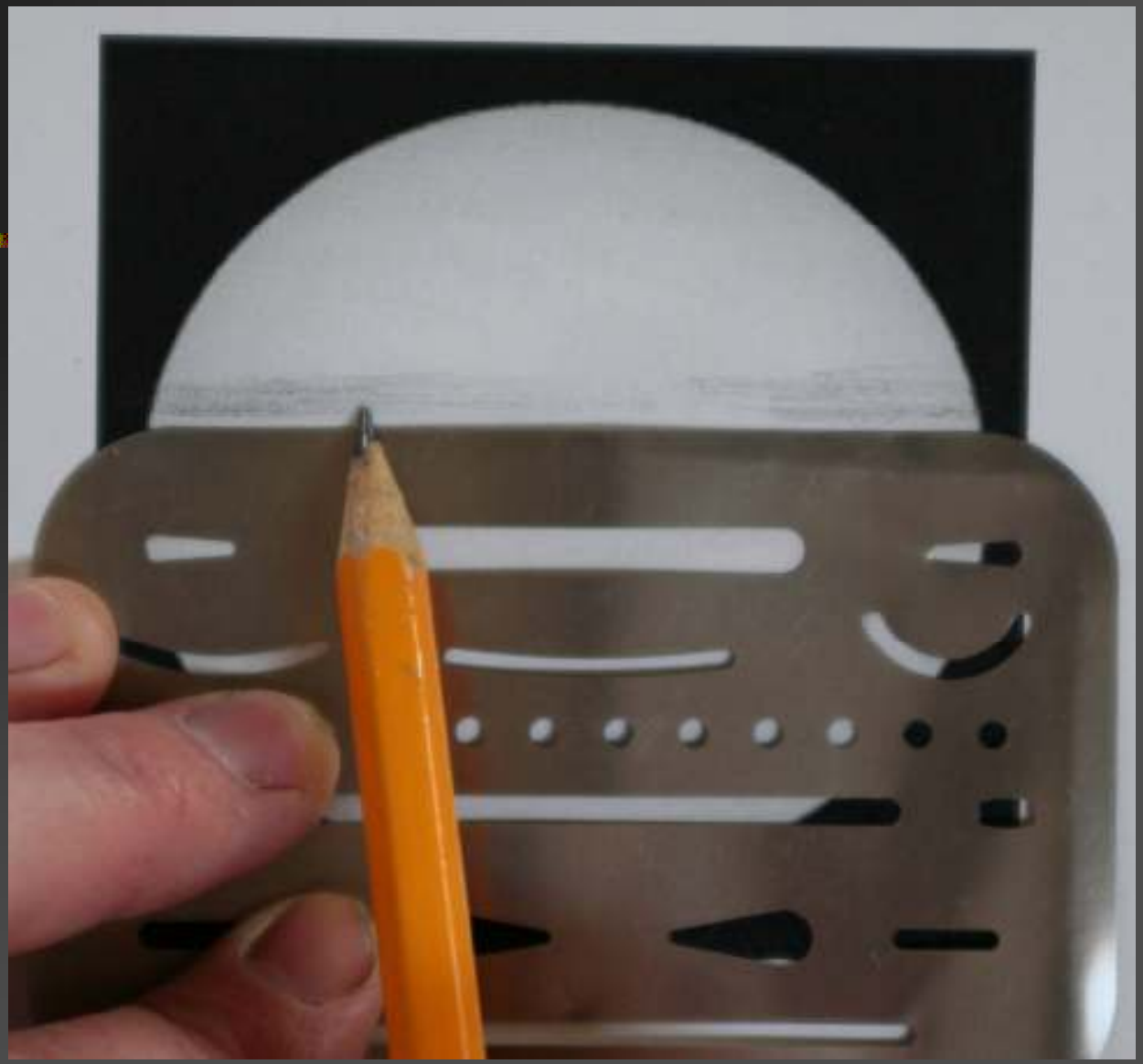
Rite in the Rain paper



Jupiter
20060528

Bands added as anchors

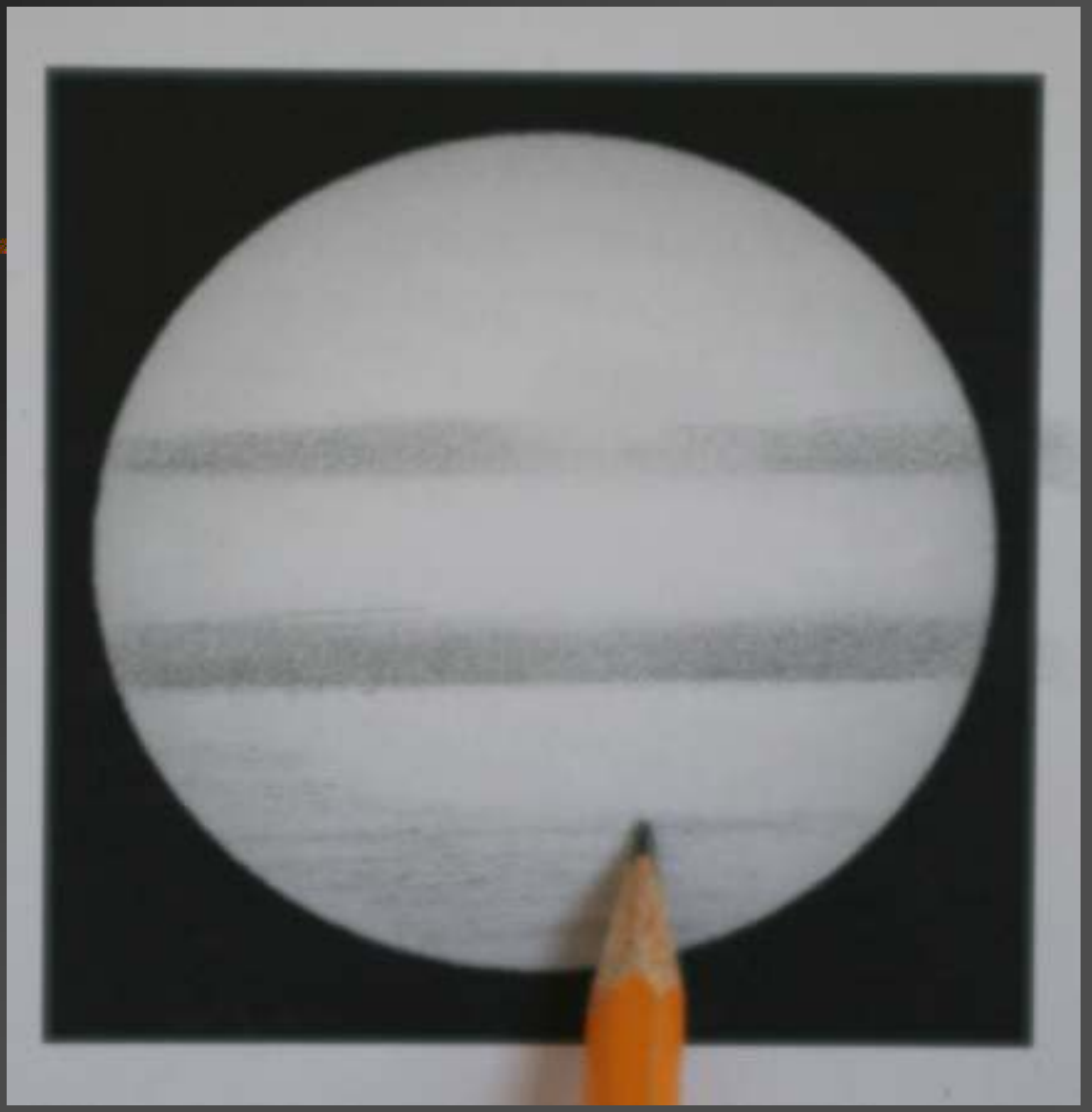
Eraser shield
#2 pencil



Jupiter
20060528

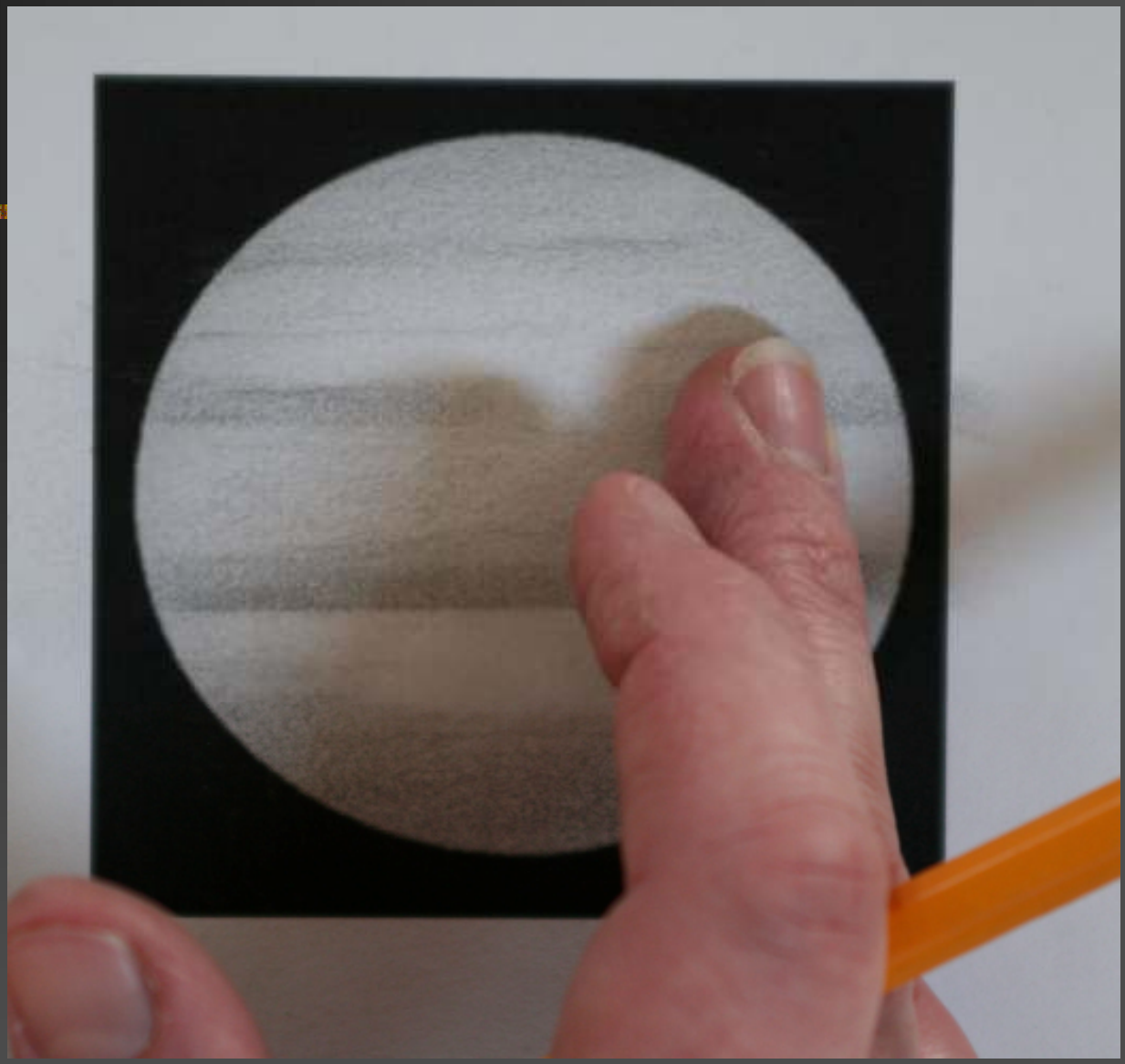
Add slower moving polar regions

#2 pencil



Jupiter
20060528

Blend with fingertip

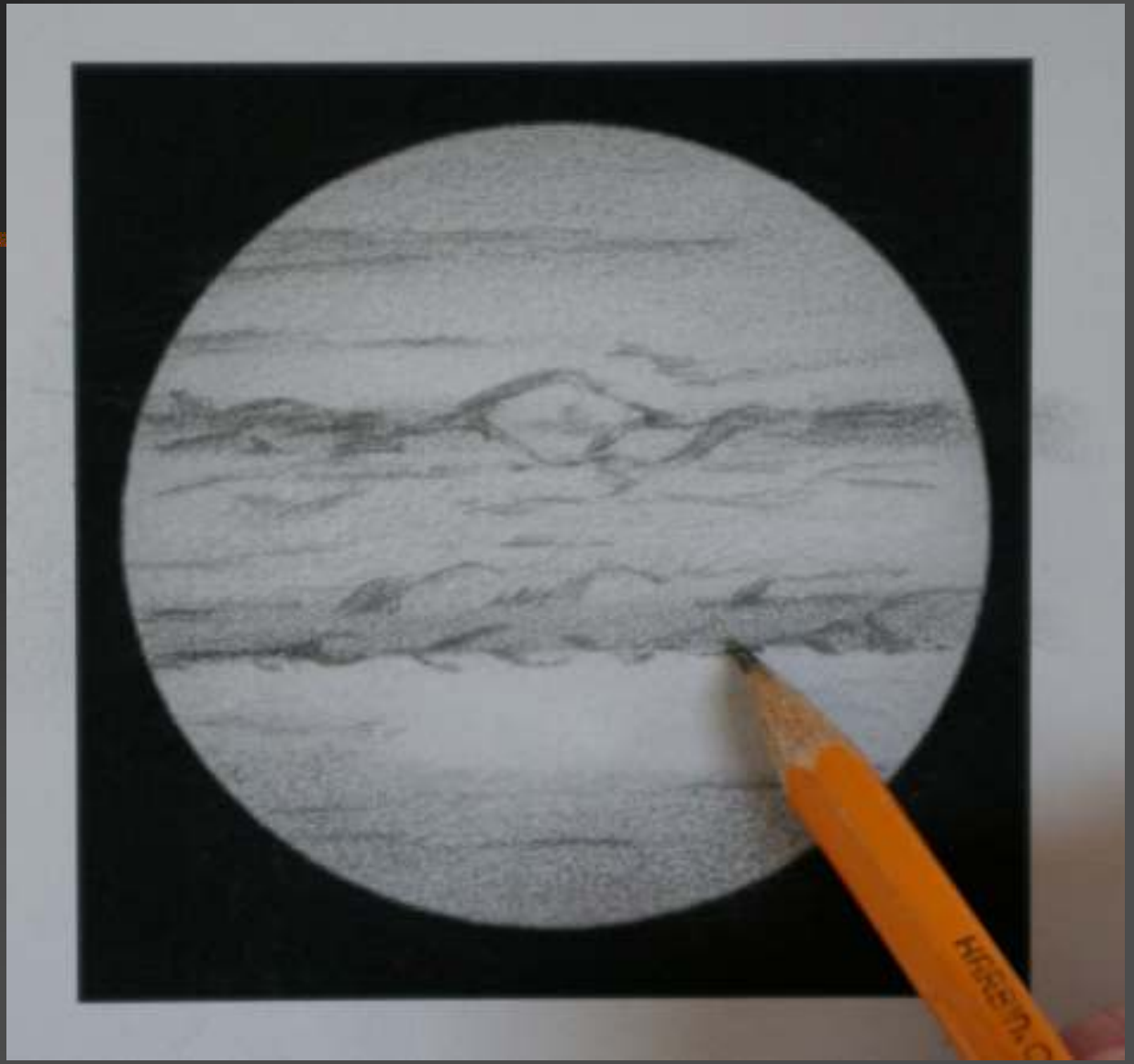


Jupiter
20060528

Add equatorial belt details

#2 pencil

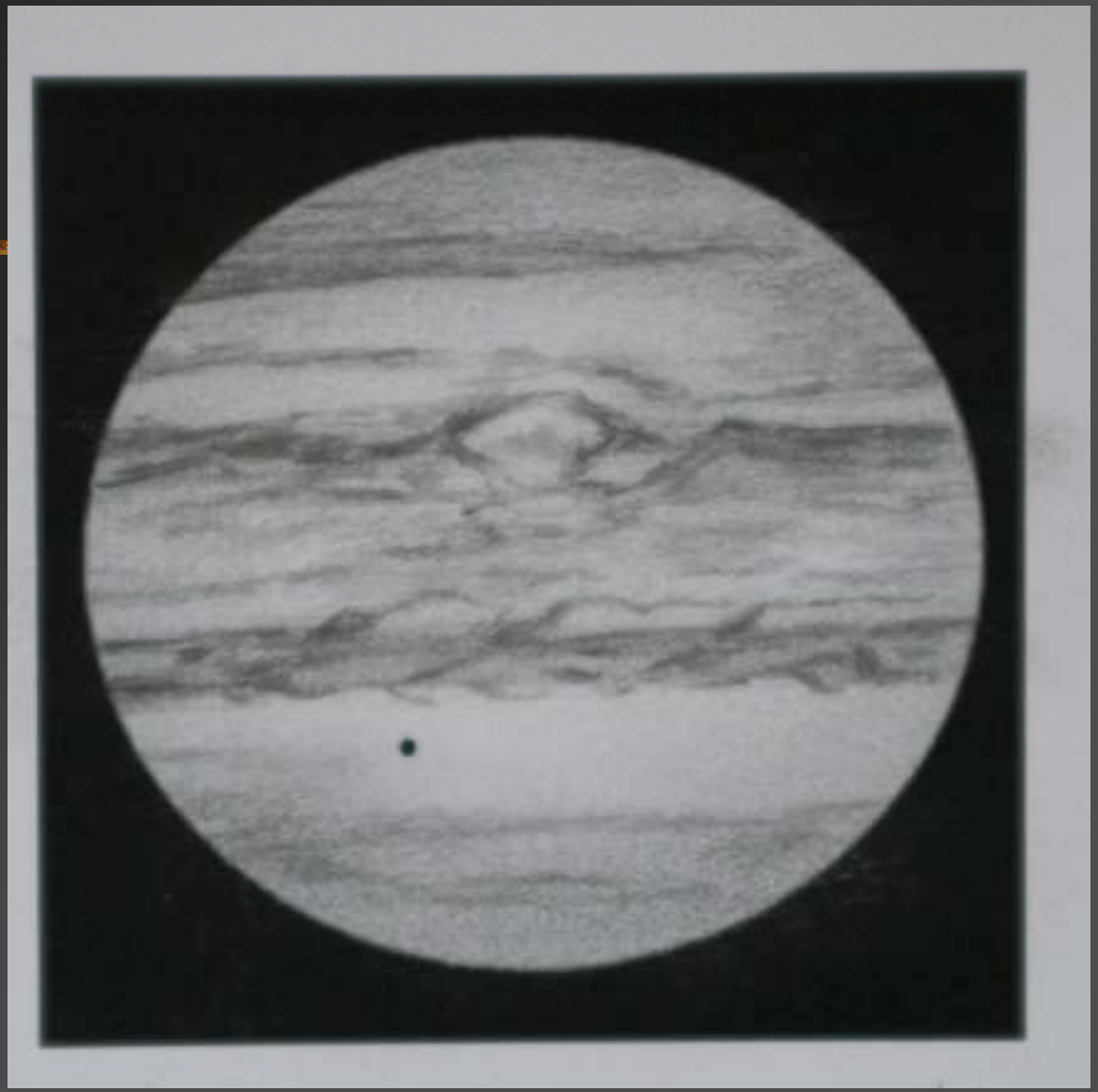
Sketch quickly, these areas move fast. You could start with preceding limb before it disappears if pressed for time.



Jupiter
20060528

Europa's shadow added

#2 pencil

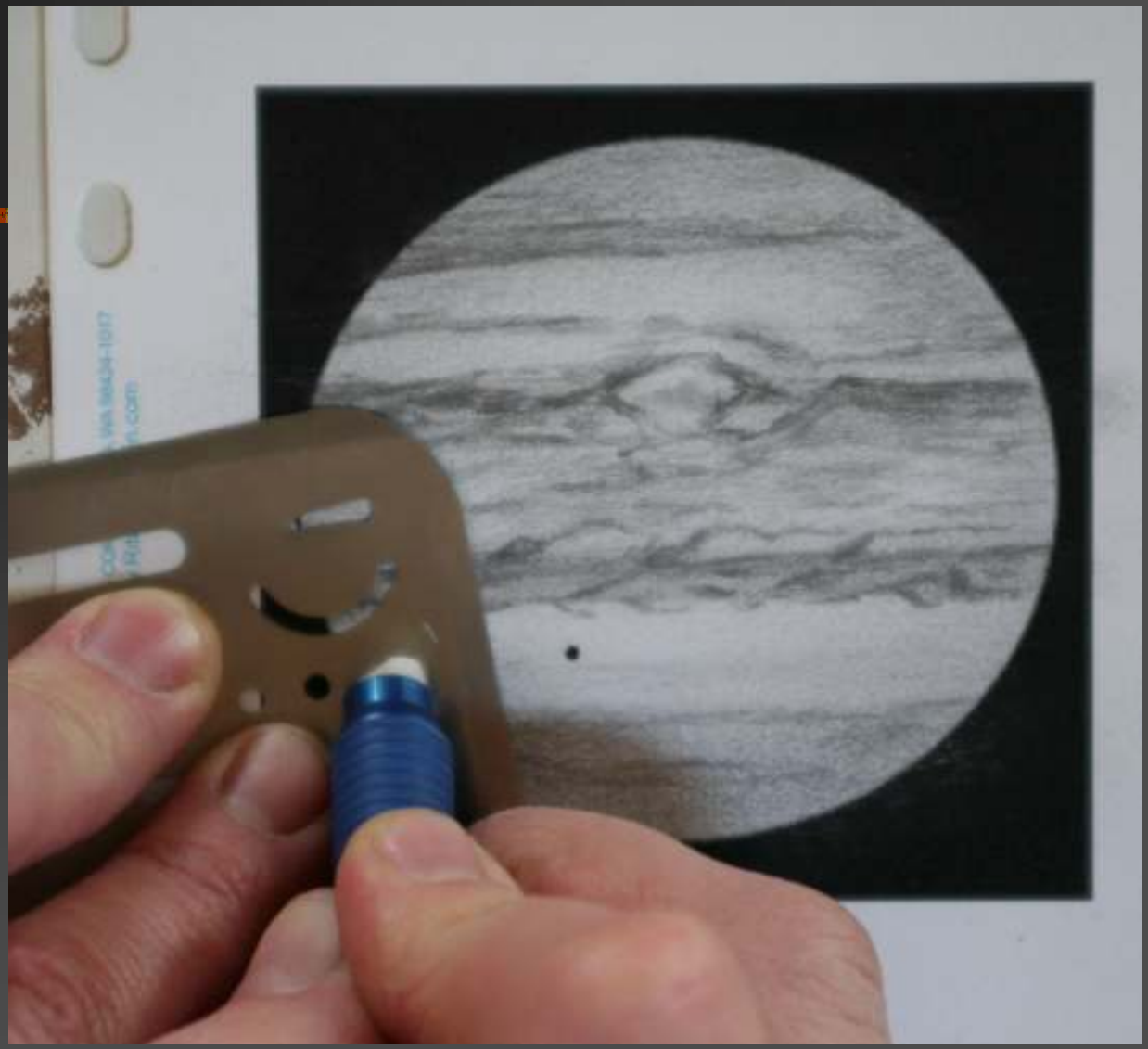


Jupiter
20060528

Europa transit added

White vinyl eraser
Eraser shield

The satellites themselves can be difficult to see. If spotted, you can erase them into the sketch.



Jupiter
20060528

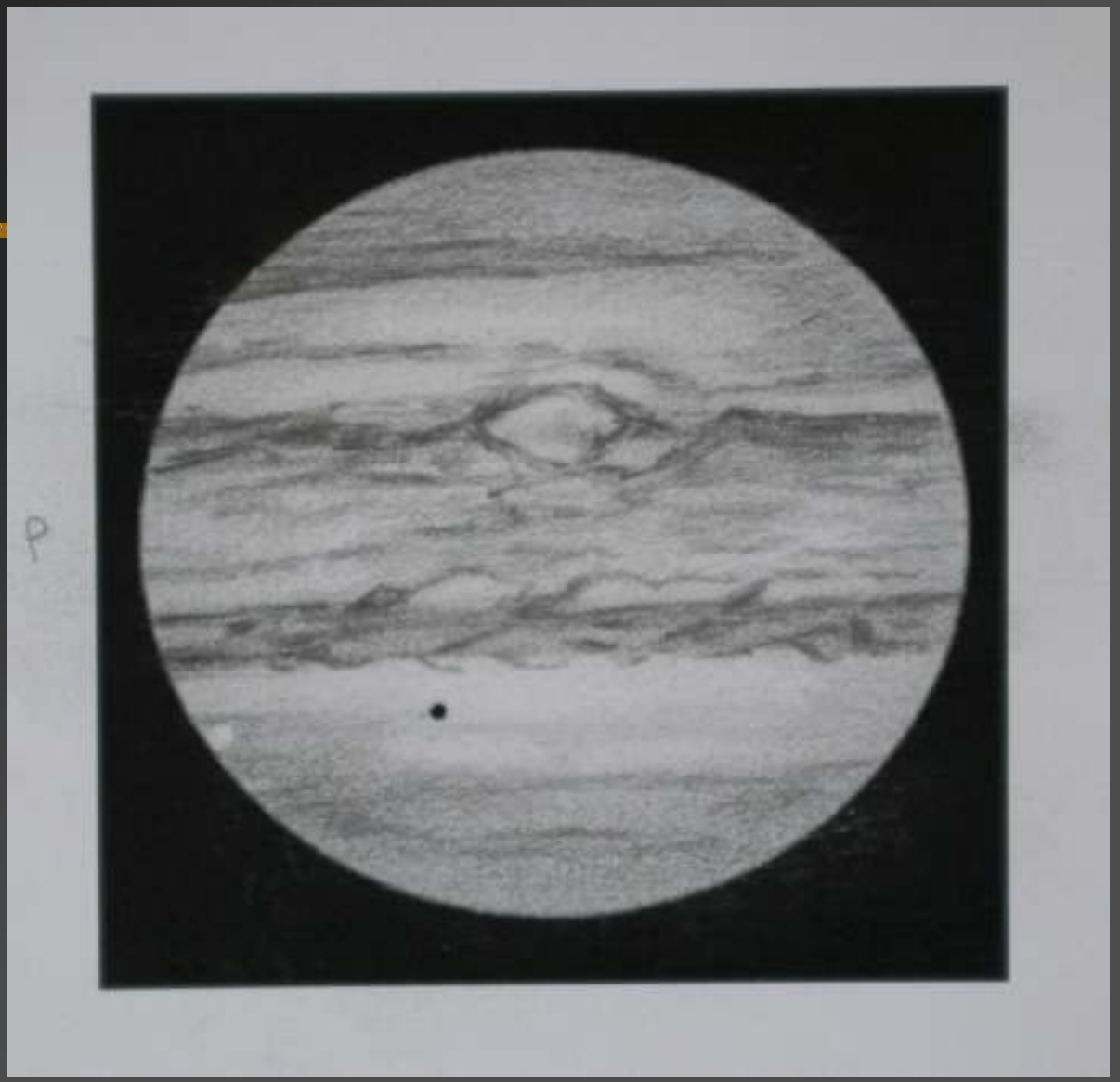
Highlights

White vinyl eraser

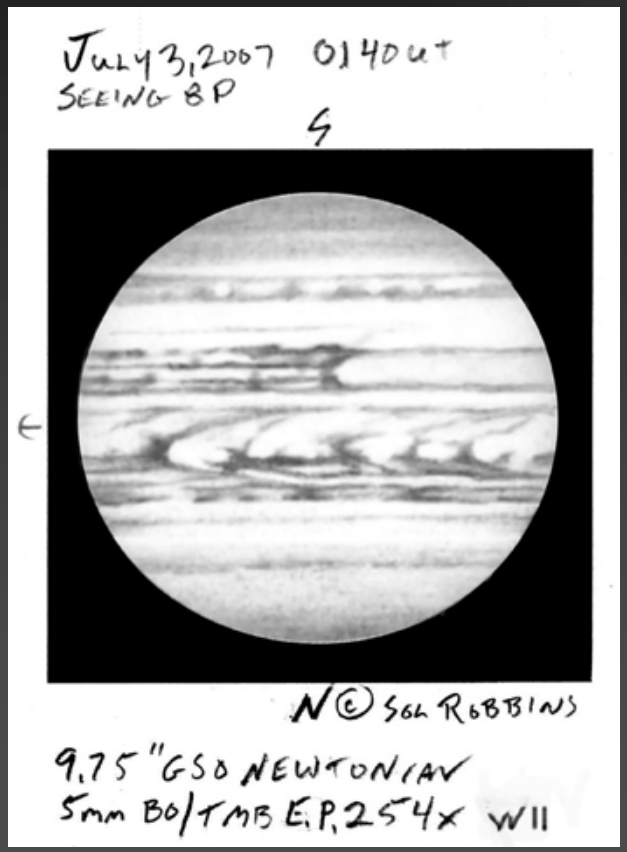
Clean up any stray markings.

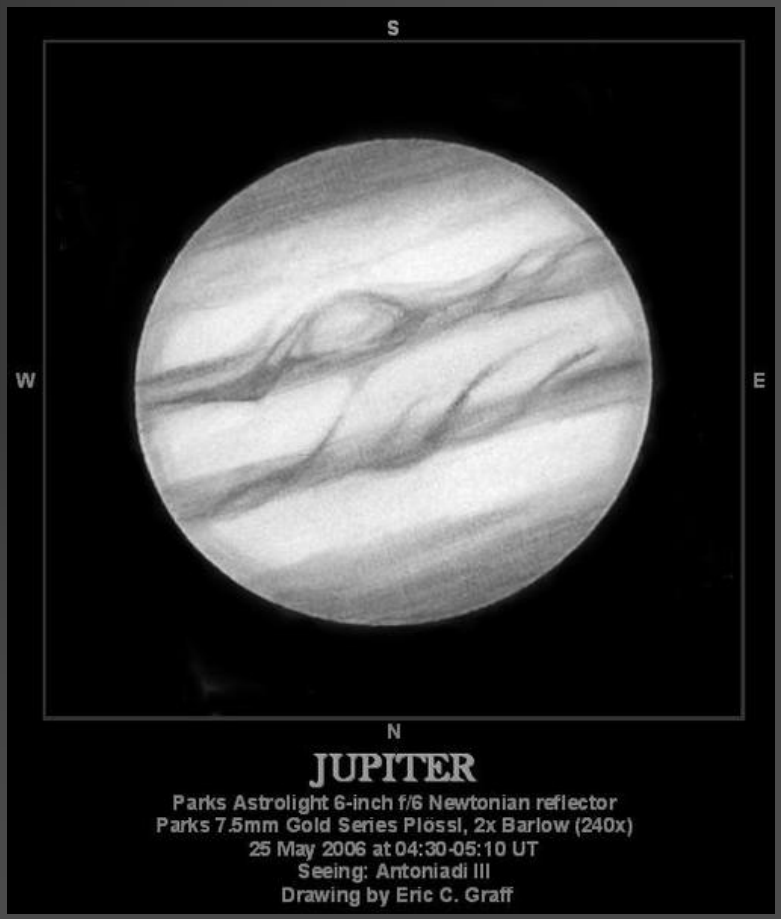
Jupiter
20060528 0145-0230 UT

LX200, 8mm TV Plossl, 18mm Meade W, blue filter



Jupiter *by Sol Robbins (left) and Eric Graff (right)*





Jupiter
by Rich Handy

5:57 UT until 6:35 UT Date: 7-12-07 Seeing: Antoniadi II Weather: clear

Telescope: Meade 12 SCT, f/10, Binoviewer: W.O. Bino-P with 1.6X nosepiece,W.O. 45 degree Erector Diagonal
Eyepieces 18 mm W.O. Plossl, Magnificaton: 271X

Medium: Colored Conte' pencils and colored chalks on 9" x 12" Strathmore Artagain black paper, Sketch size: 9" x12" Jupiter's disk is about 5" in diameter

Mars *by Eric Graff*

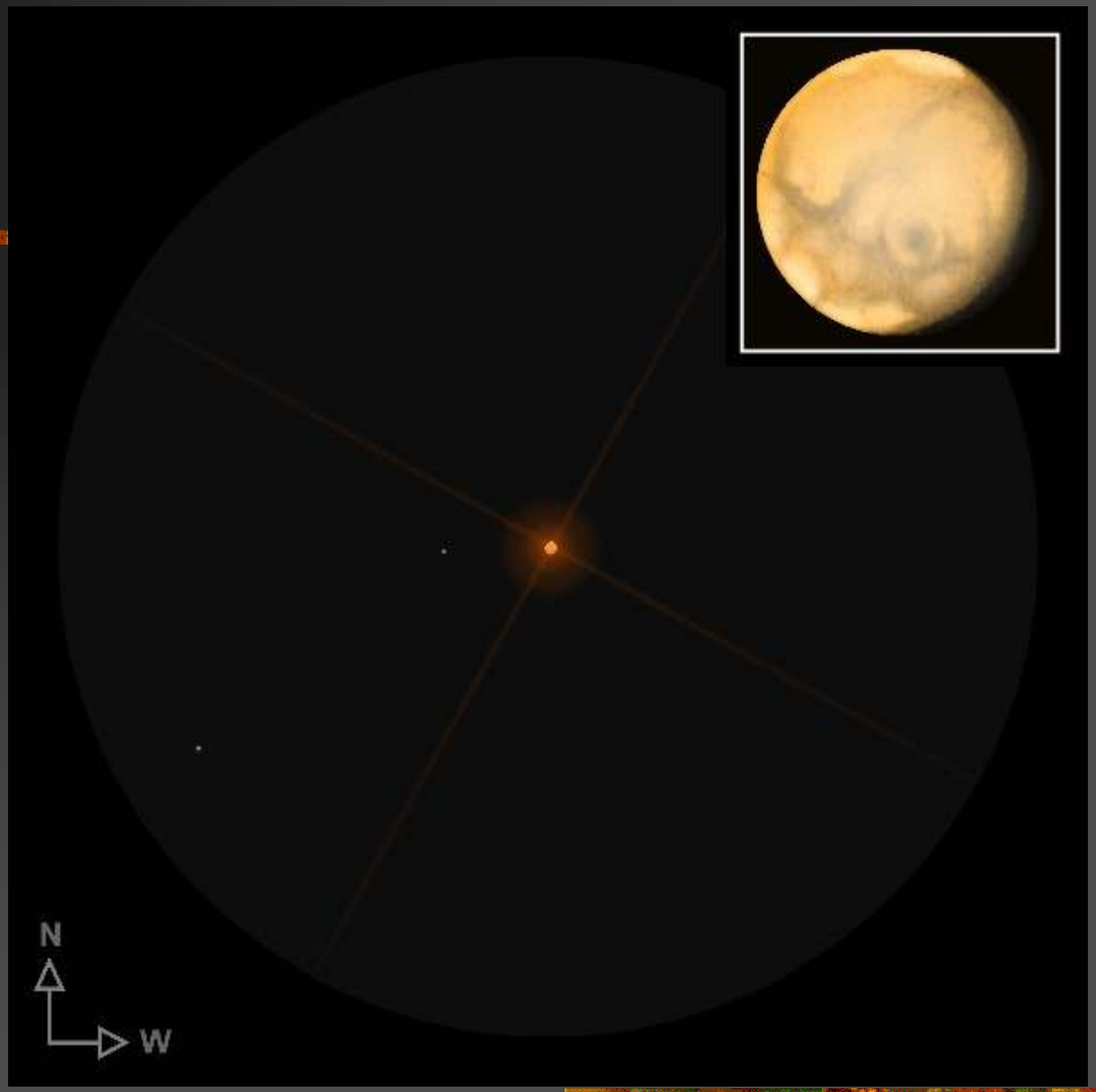
San Diego, CA

30 September 2007

12:30-13:00 UT

Parks Astrolight EQ6

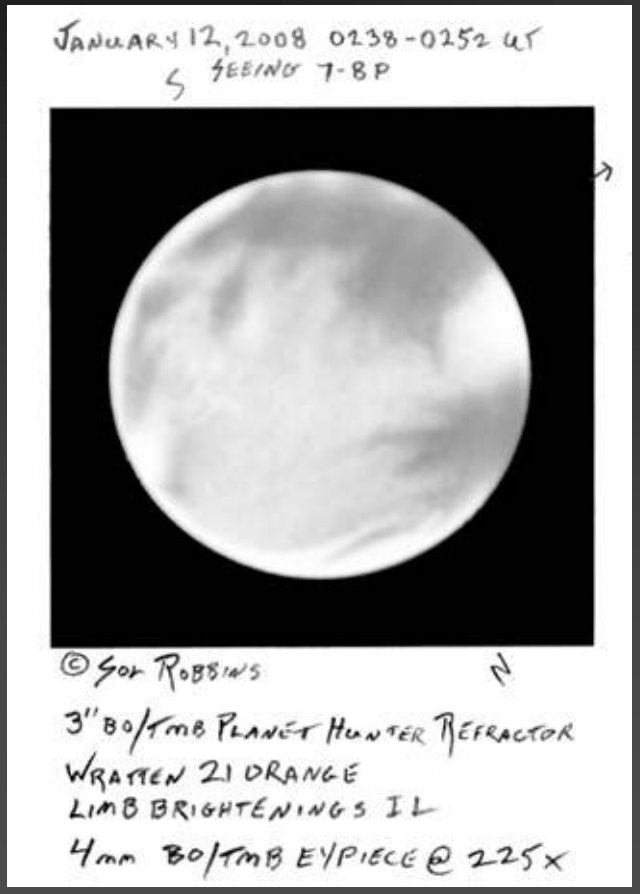
6" f/6 Newtonian Reflector
7.5mm Parks Gold Series
Plössl + 2x Barlow • 240x
Field of View Not to Scale



Mars *by Sol Robbins*

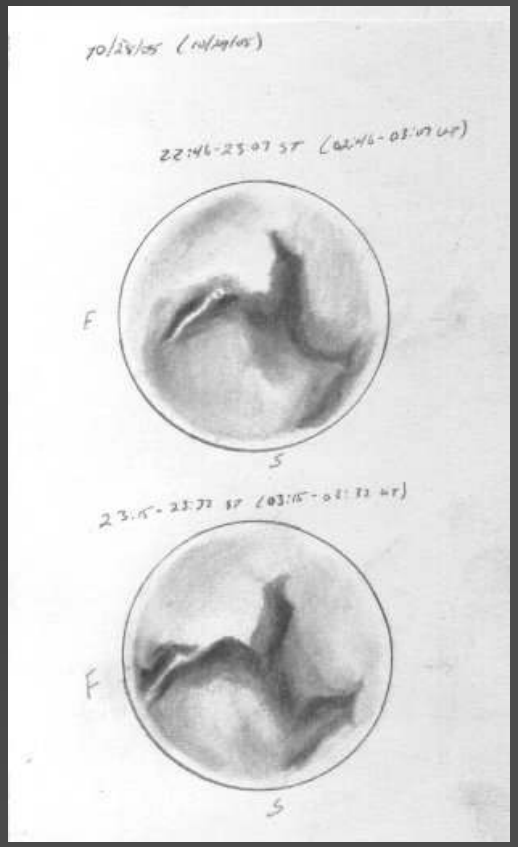
Observing Factors

- filter
- seeing conditions
- aperture
- magnification
- date

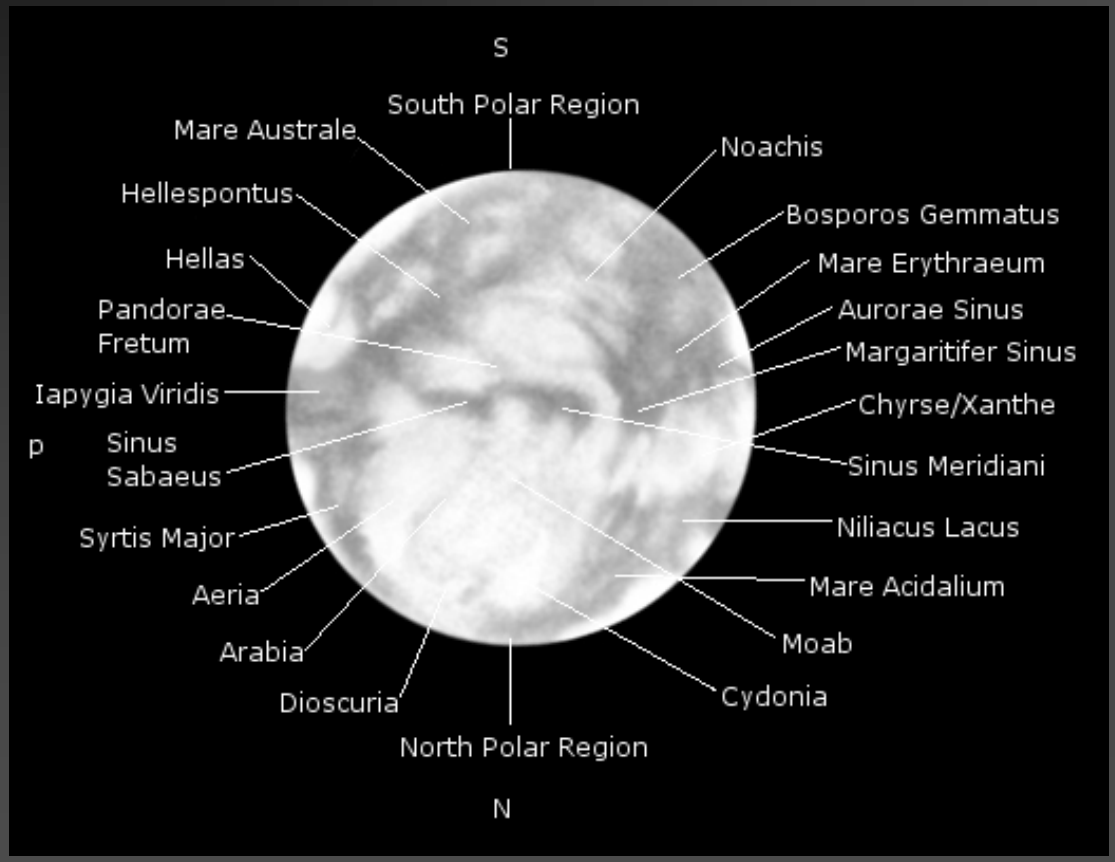


Mars *by Erika Rix*

- aperture
- dates
- charcoal
- paper
- lack of template
- lack of experience

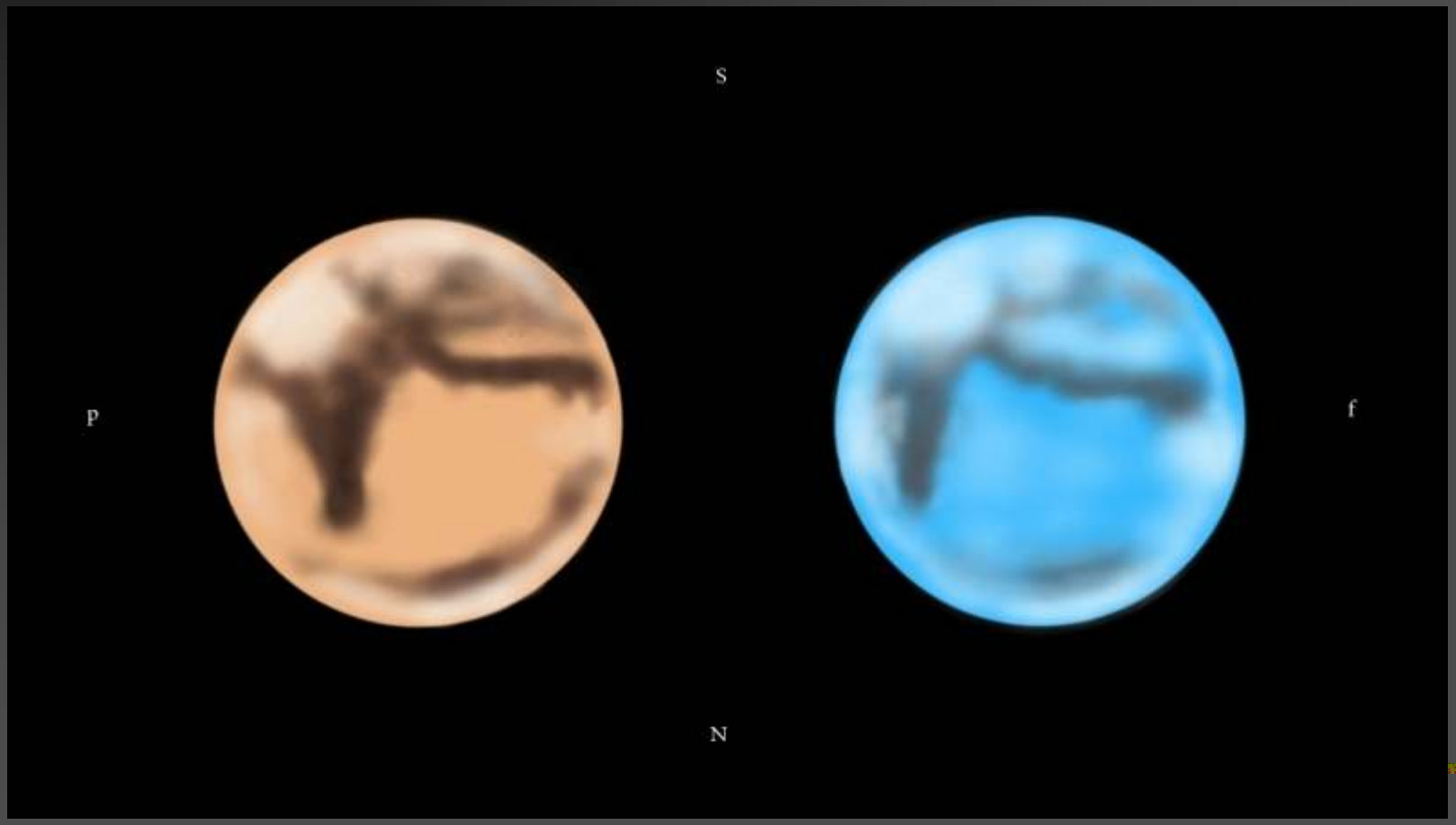


Mars sketch by Sol Robbins, labeled by Carlos Hernandez



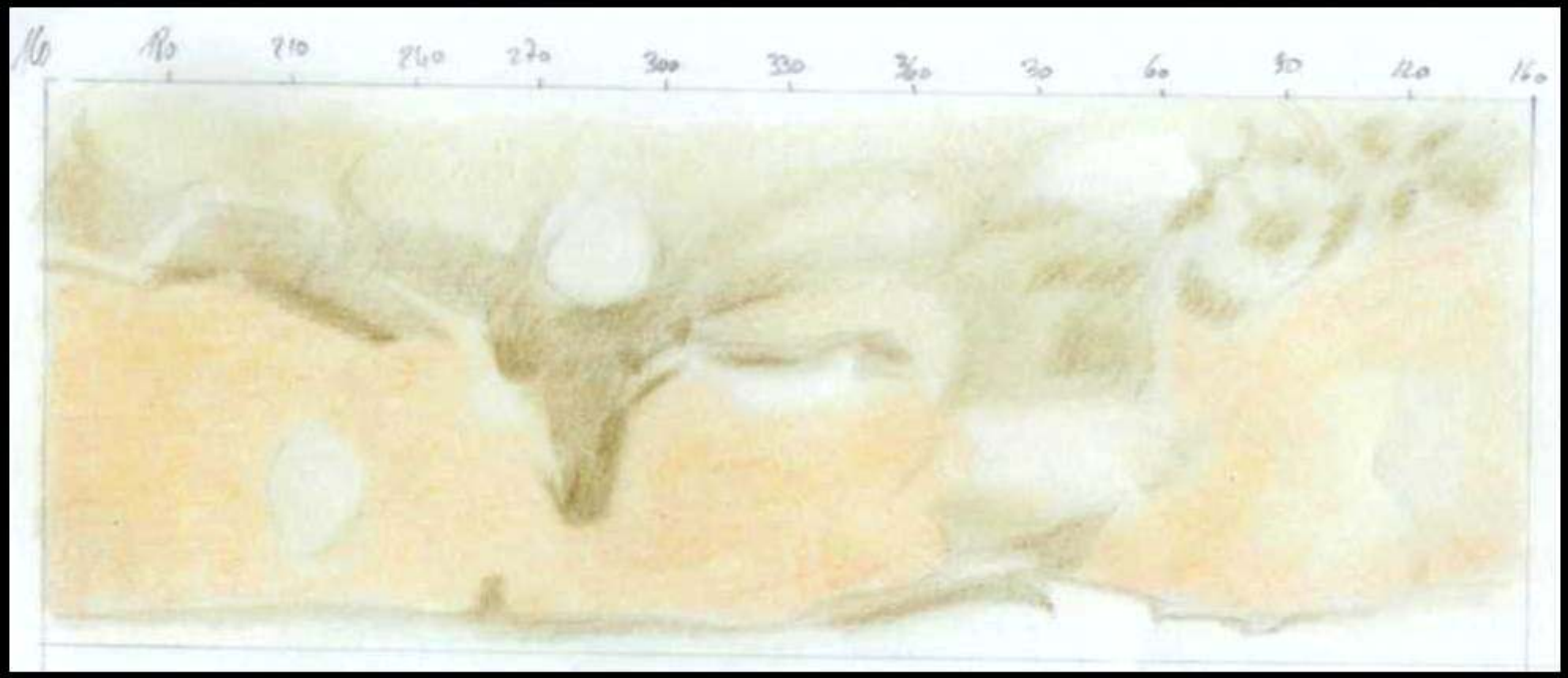
Mars *by Carlos Hernandez*

Date (U.T.): January 27, 2008
Time (U.T.): 02:30 (left image and 03:00 (right image)
CM: 322.8 (left image) and 330.2 (right image)
Ls: 023.0* (Early Northern Spring/Southern Autumn)
De: -2.5*, Diameter 12.6". phase 96%
Instrument: 9-inch (23-cm) F/13.5 Maksutov-Cassegrain
Magnification: 248x and 359x
Filters (Wratten): 30 (magenta) and 38A (blue)
Seeing (1-10): 5, Antoniadi (I-V): III
Transparency (1-6): 5

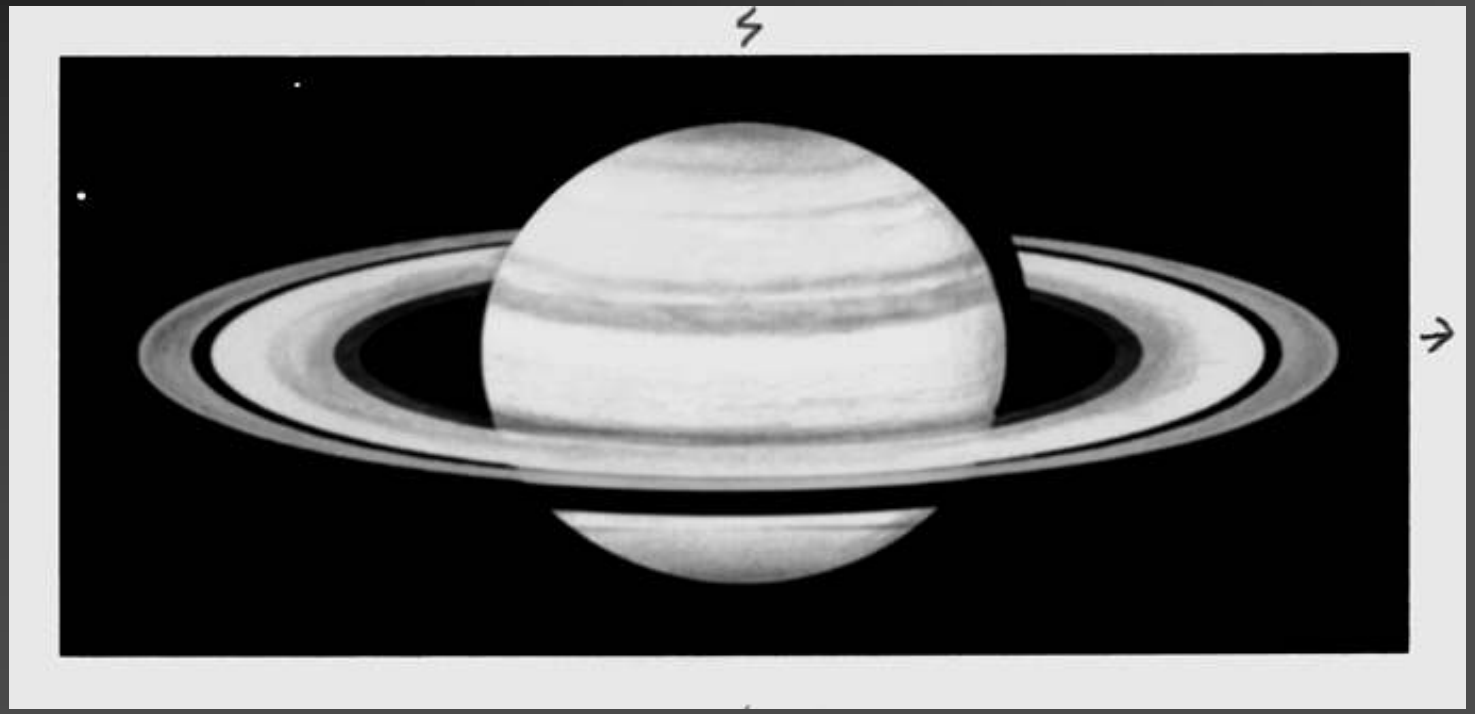


Mars map 07082
by Kris Smet

A4 printer paper



Saturn *by Sol Robbins*

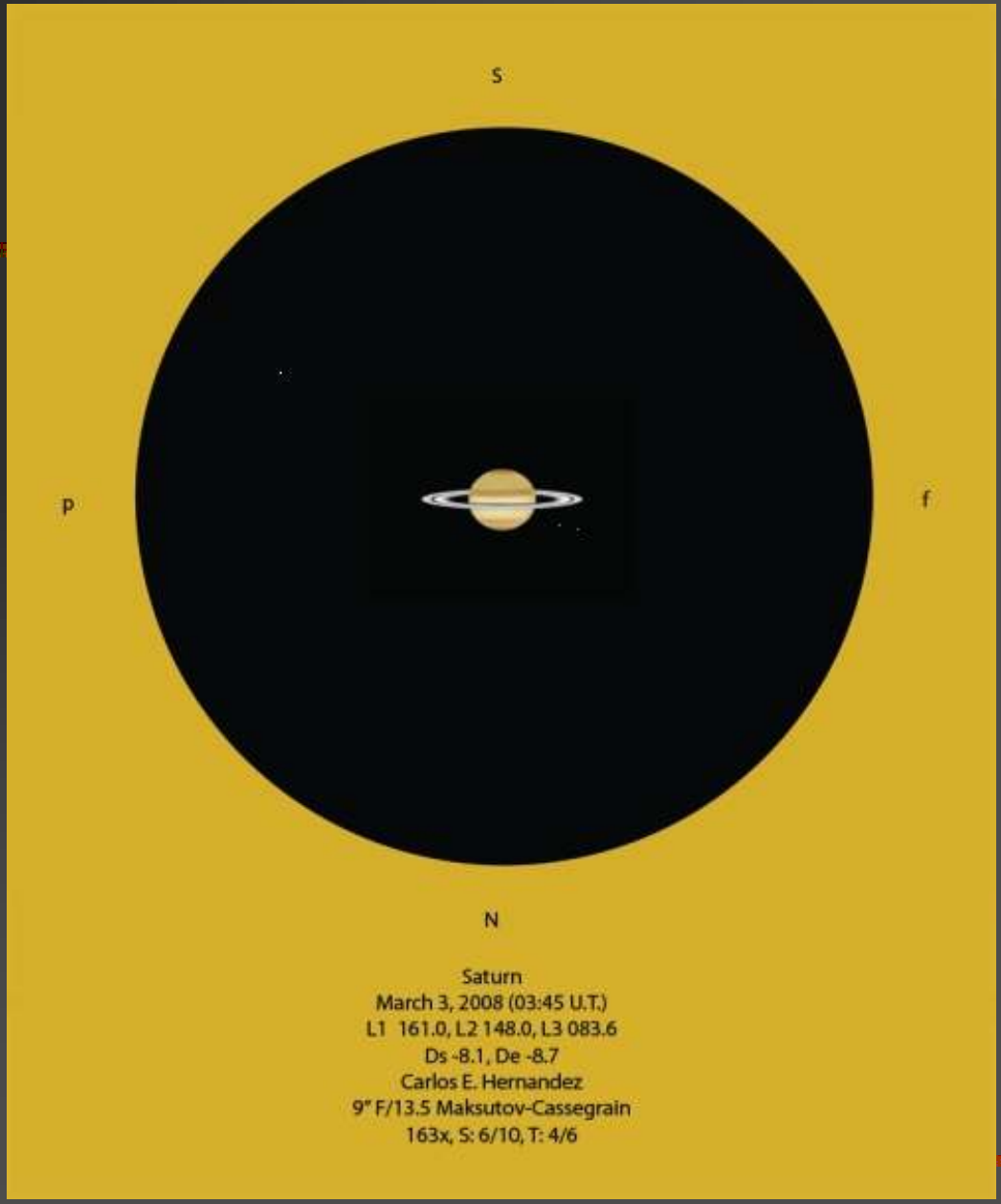


Saturn
by Carlos Hernandez

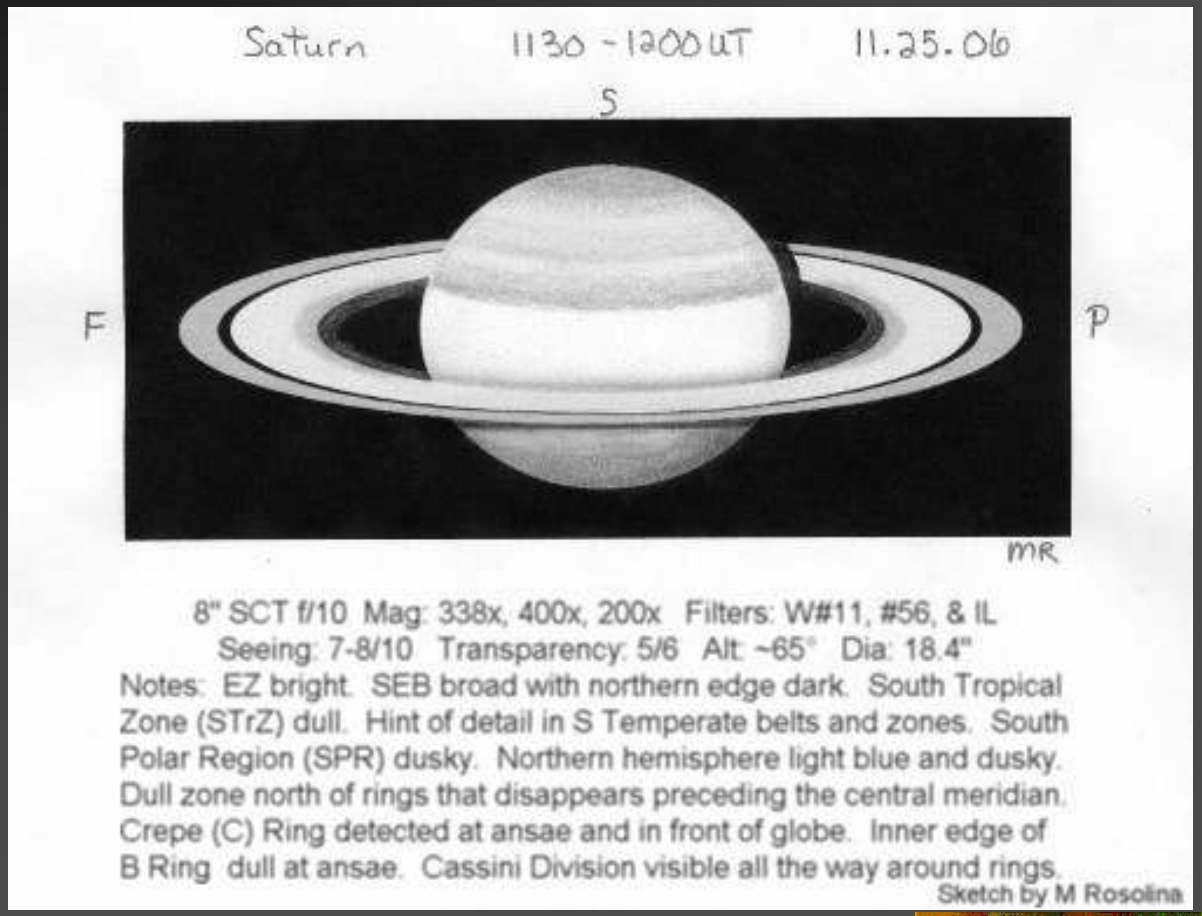
Florida

March 3, 2008 (03:45 U.T.)
9-inch F/13.5 Maksutov-Cassegrain (163x)

Digital rendering produced in Photoshop CS3 based on observation



Saturn
by Michael Rosolina



8" SCT f/10 Mag: 338x, 400x, 200x Filters: W#11, #56, & IL
Seeing: 7-8/10 Transparency: 5/6 Alt: ~65° Dia: 18.4"
Notes: EZ bright. SEB broad with northern edge dark. South Tropical Zone (STrZ) dull. Hint of detail in S Temperate belts and zones. South Polar Region (SPR) dusky. Northern hemisphere light blue and dusky. Dull zone north of rings that disappears preceding the central meridian. Crepe (C) Ring detected at ansae and in front of globe. Inner edge of B Ring dull at ansae. Cassini Division visible all the way around rings.

Sketch by M Rosolina

The Sun

- Study first
- Quick Schematic
- Close up targets
- Work quickly
- Keep in perspective!
- Concentrate on shapes and sizes
- Take notes

Erika Rix

Close up Proms

The Sun
20080123

White Conte' crayon
Black Strathmore Artagain paper

Create limb arc

Close up Proms

The Sun
20080123

Fingertip

Blend roughly

Close up Proms

The Sun
20080123

White Conte' pencil

Brightest areas first

Close up Proms

The Sun
20080123

White Prang pencil

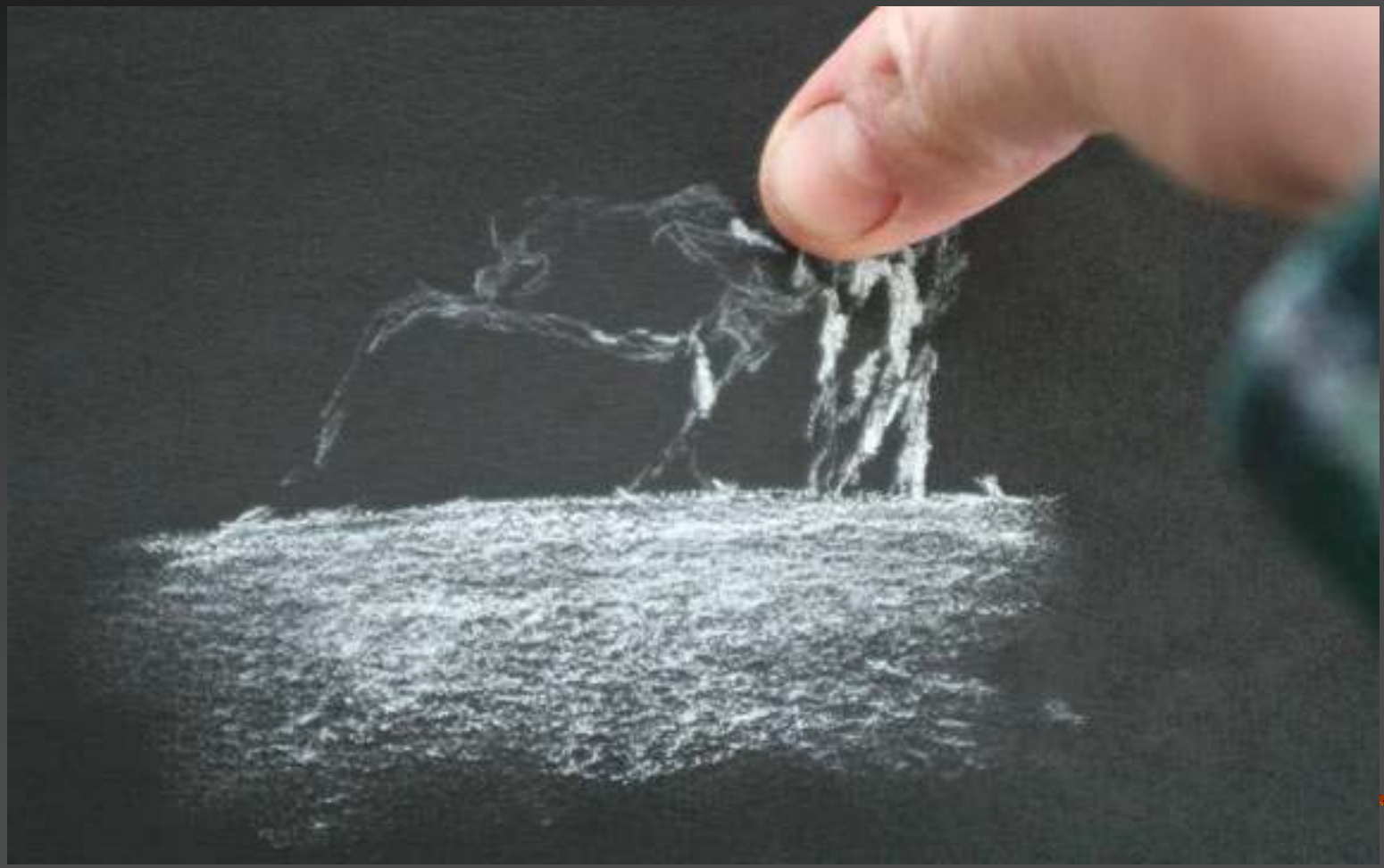
Add fainter details

Close up Proms

The Sun
20080123

Thumb

Smudge gently



Close up Proms

The Sun
20080123

White Conte' pencil

Touch up

Close up Proms

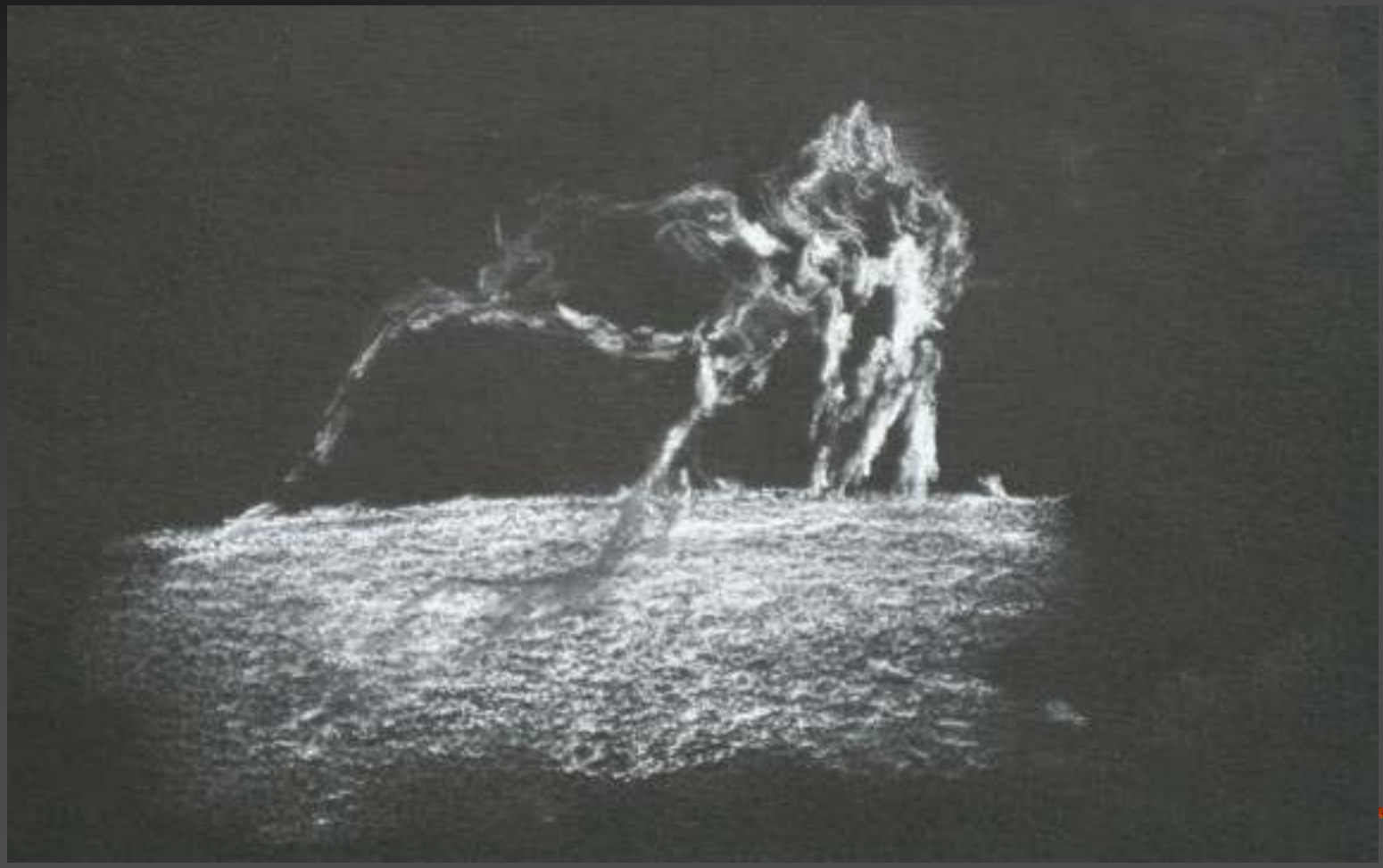
The Sun
20080123

Charcoal pencil

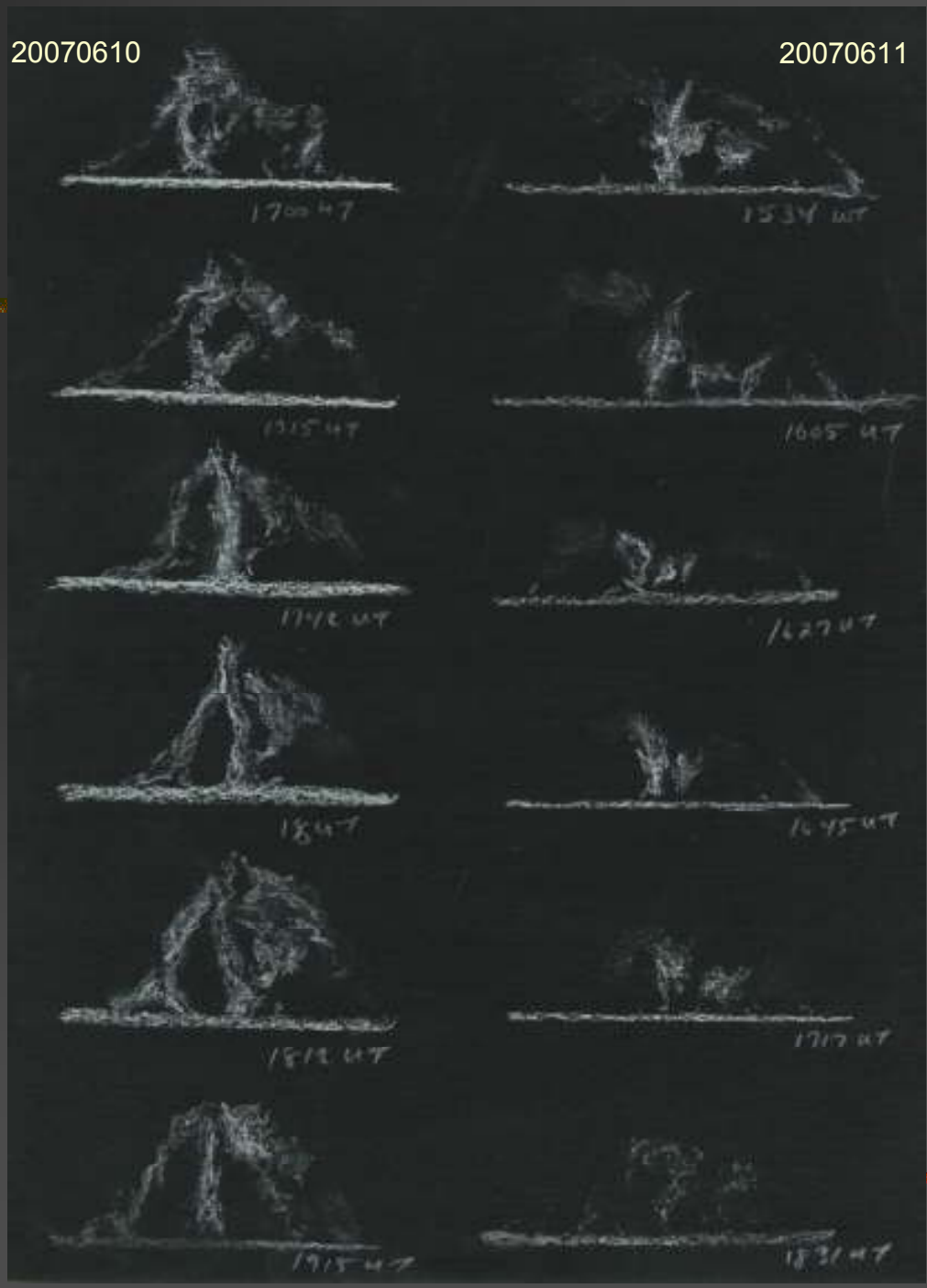
Add surface detail

The Sun
20080123 1737 UT

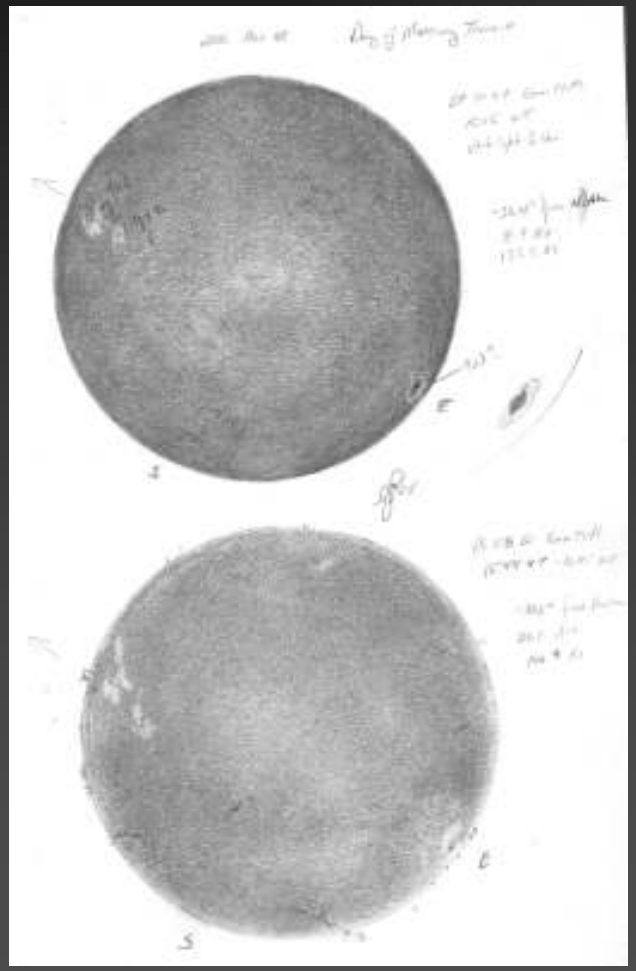
Internally double-stacked Maxscope
60mm, <0.5A LXD75, 21-7mm
Zhummell, PCW Memorial Observatory

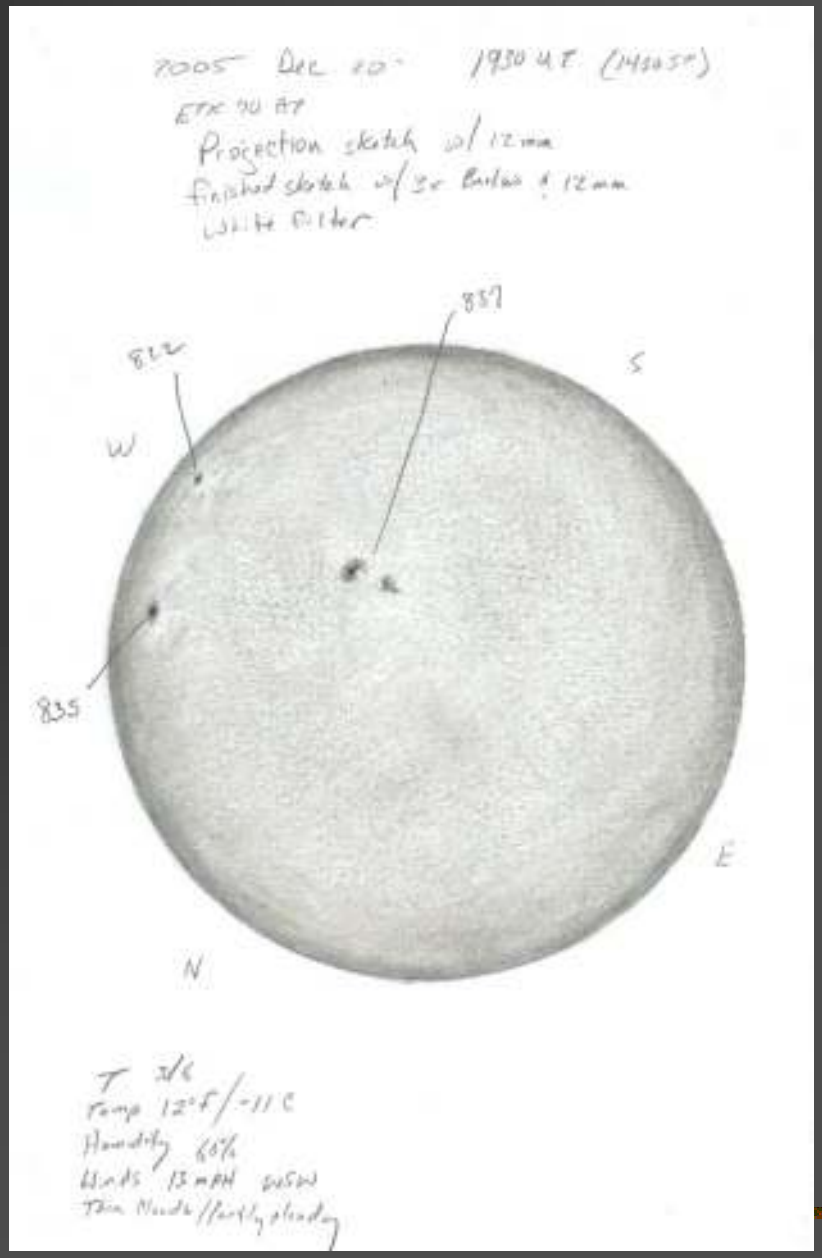


Sun *by Erika Rix*

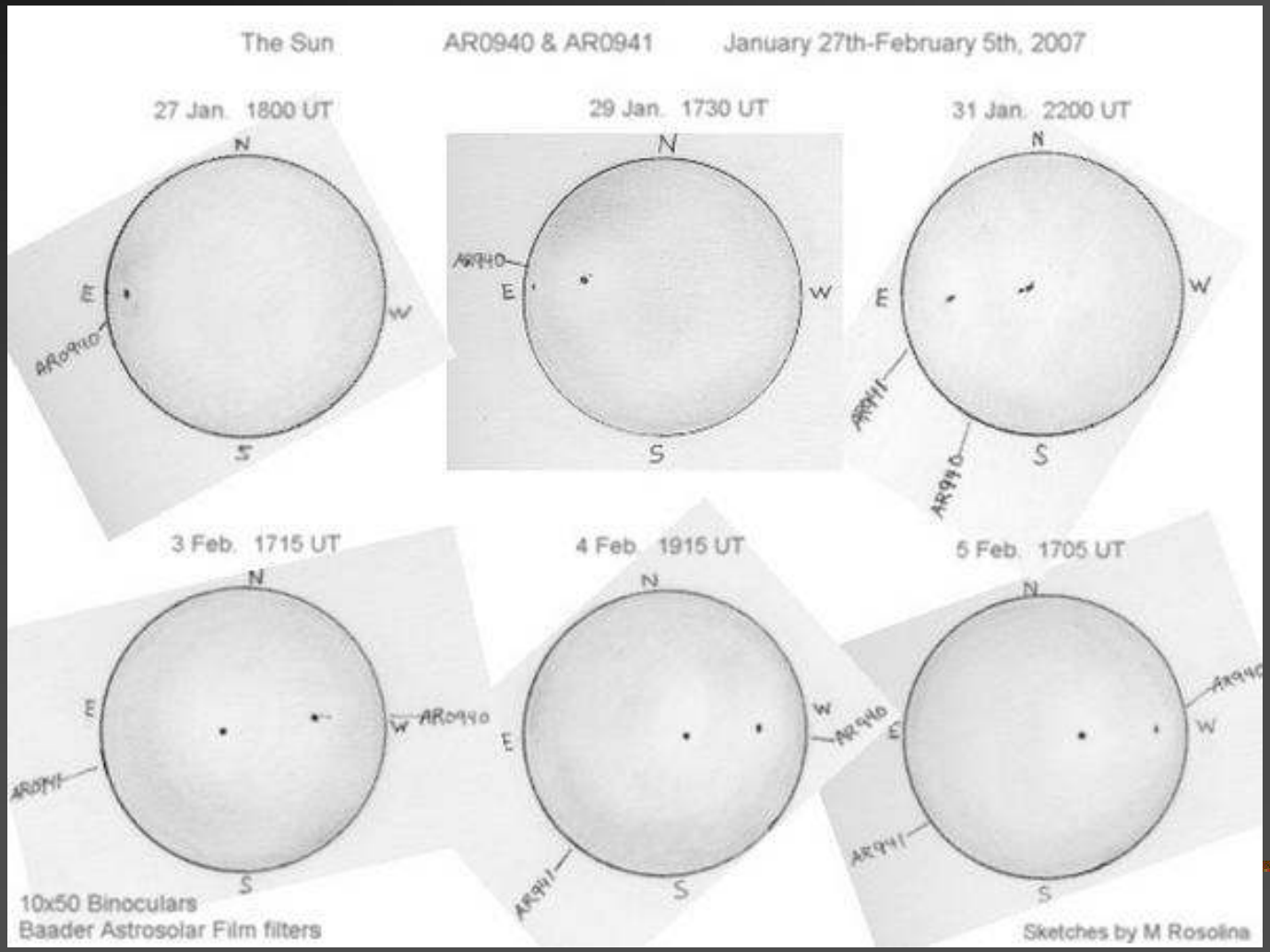


Sun *by Erika Rix*



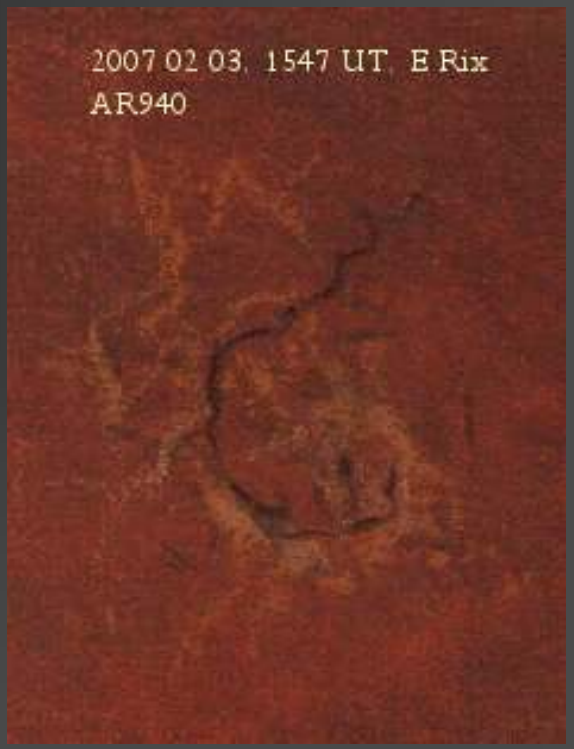


Tracking Active Region *by Michael Rosolina*



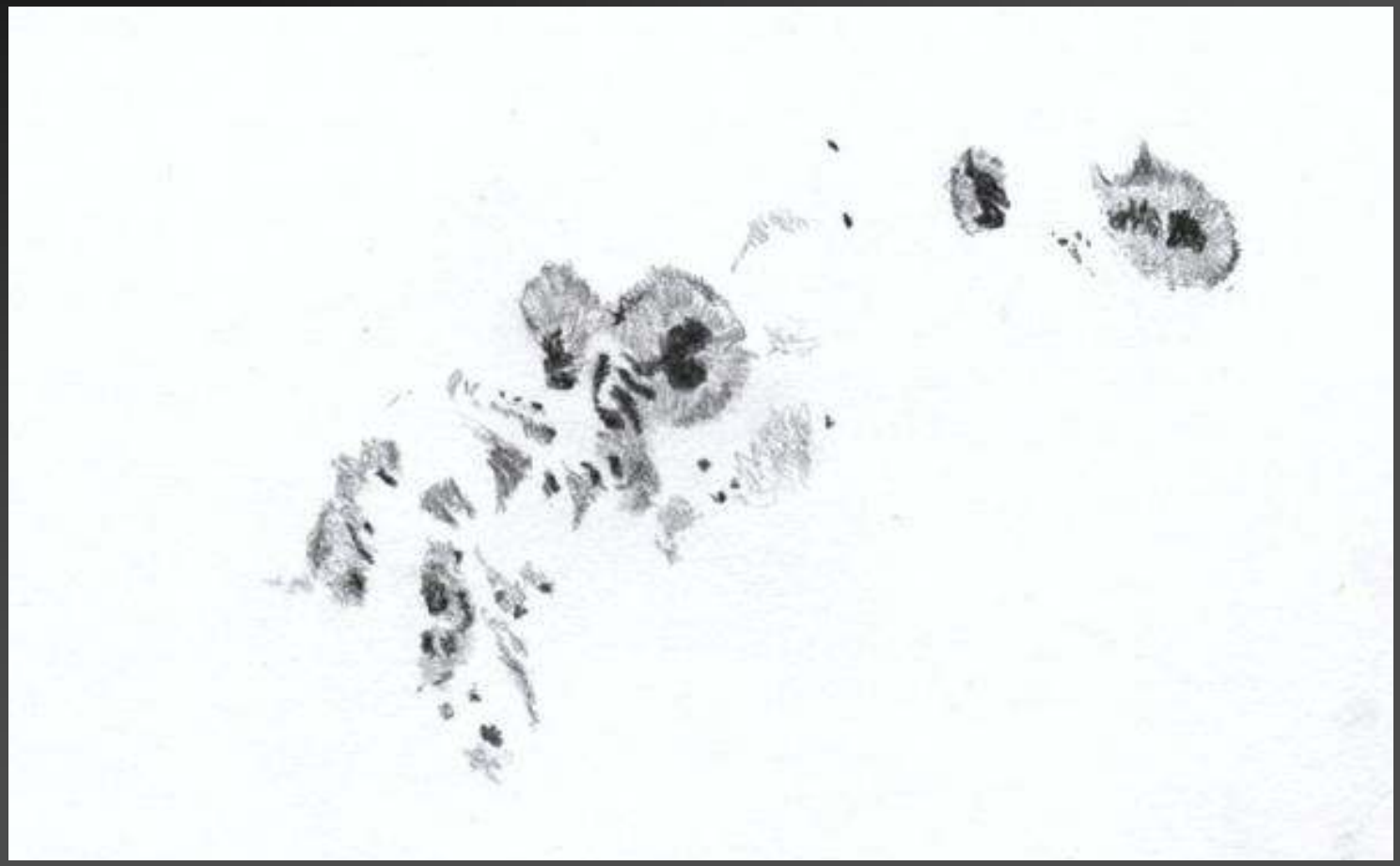
AR 940 03 Feb 2007, 1344-1415 UT
by Sally Russell

AR 940 03 Feb 2007, 1547 UT
by Erika Rix



Graphite pencil on white cartridge paper.
Sketch size 4" x 3"

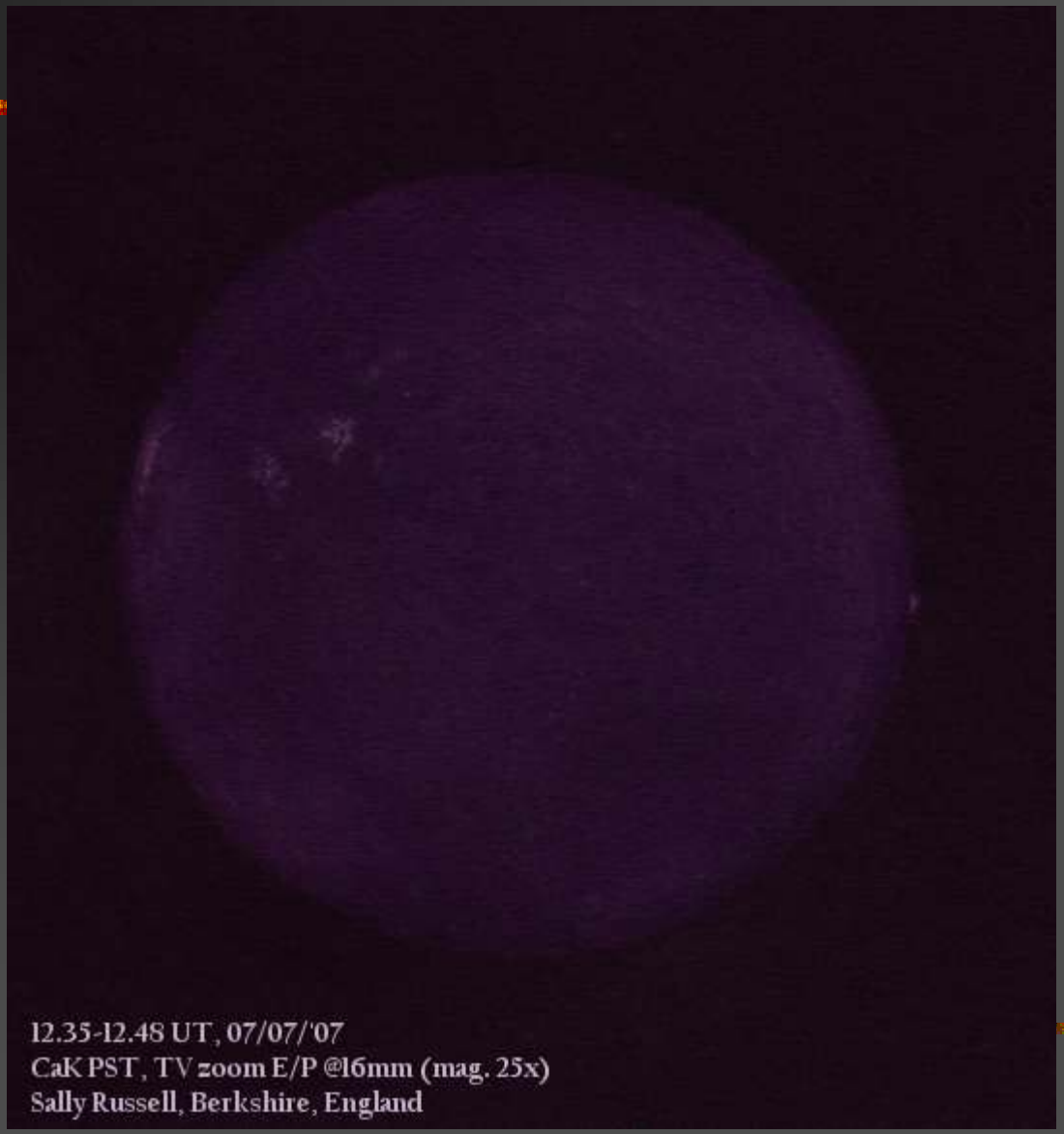
AR960 03 June 2007, 10.50-11.28 UT
by Sally Russell

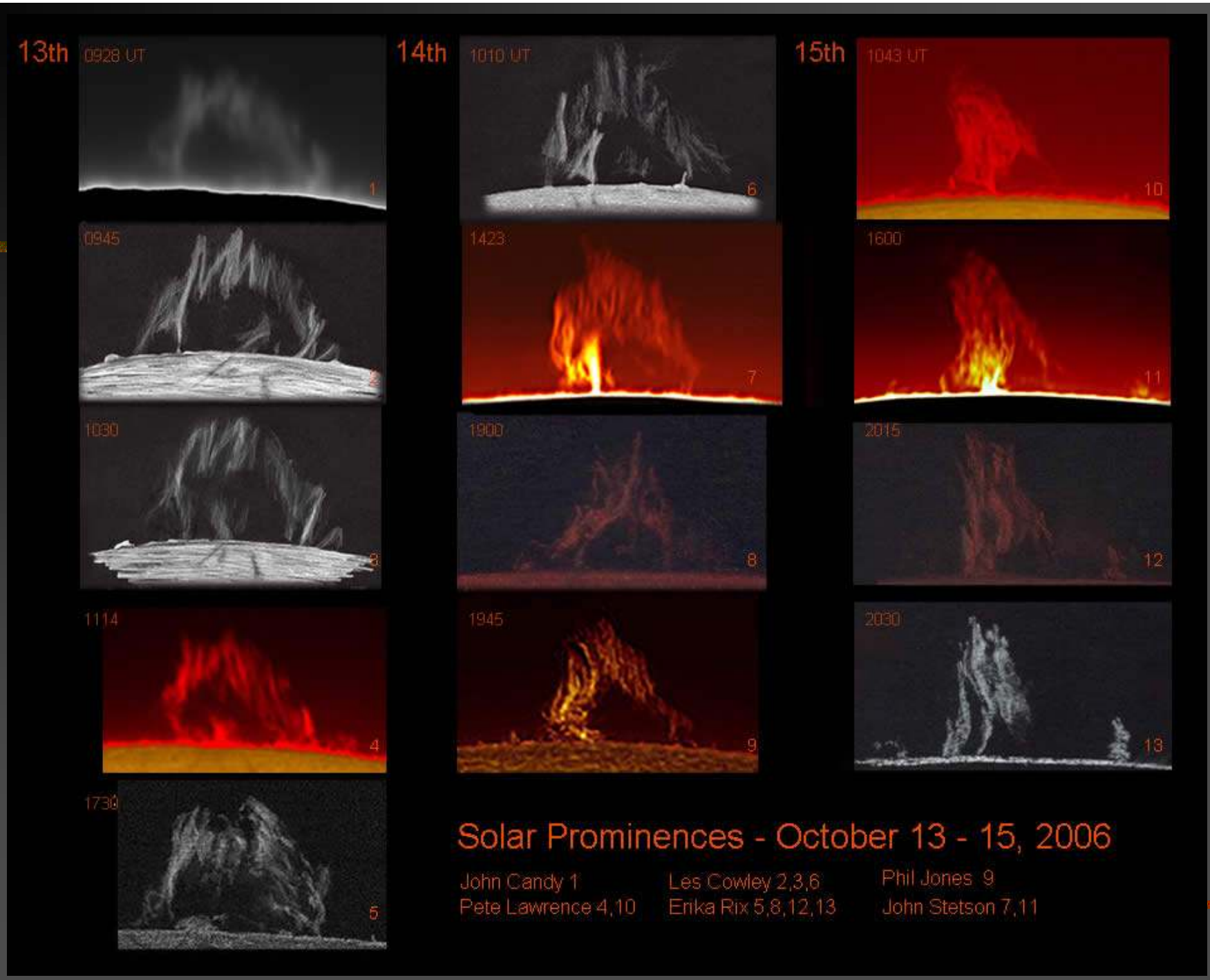


CaK full disc 7 July 2007
by Sally Russell

Watercolor pencil & chalk pastel
on black paper

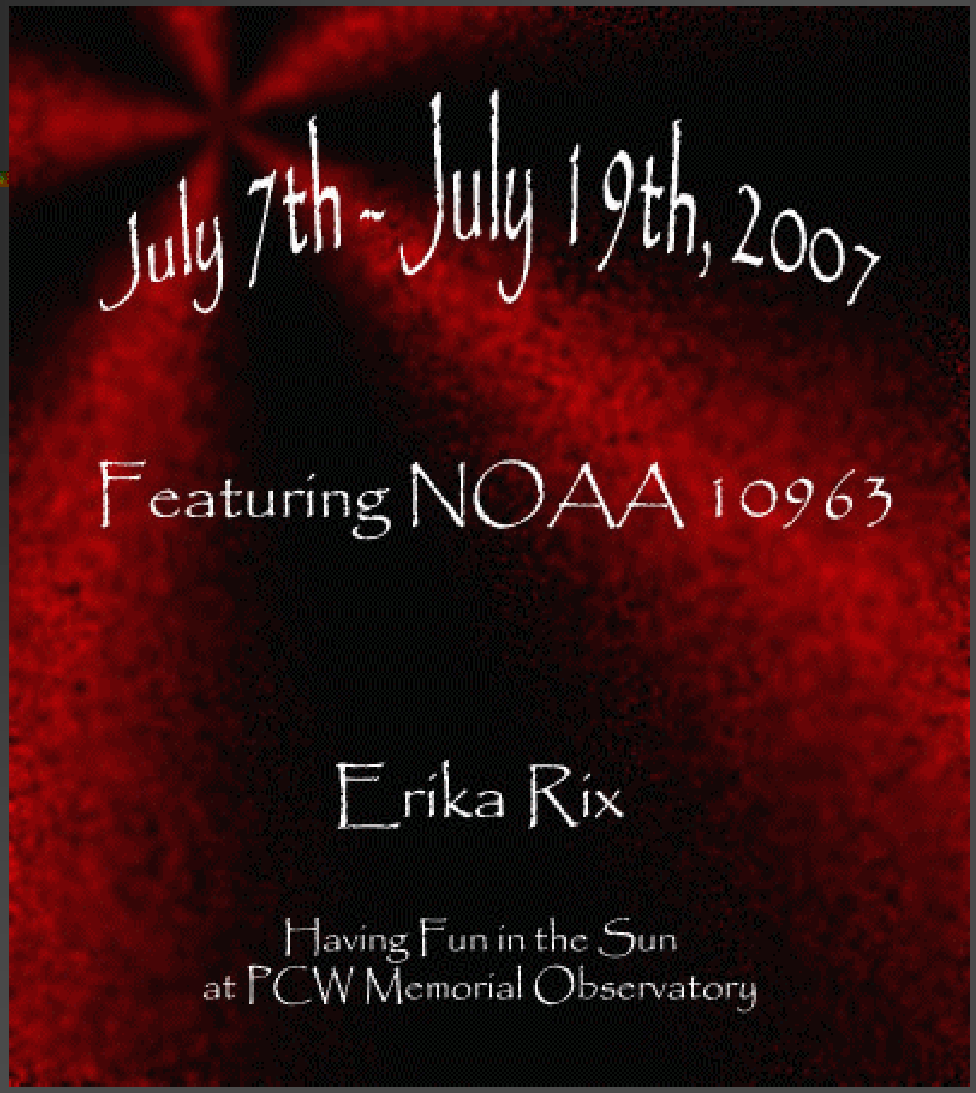
Sketch size 4" x 4"




13th
0928 UT
1
0945
2
1030
3
1114
4
1730
5
14th
1010 UT
6
1423
7
1900
8
1945
9
15th
1043 UT
10
1600
11
2015
12
2030
13
Solar Prominences - October 13 - 15, 2006
John Candy 1
Pete Lawrence 4,10
Les Cowley 2,3,6
Erika Rix 5,8,12,13
Phil Jones 9
John Stetson 7,11

13 Day Animation of Sun

by Erika Rix



Resources

- Other visual observers/sketchers
- “Astronomical Sketching, a Step by Step Introduction”
- Cloudy Nights’ sketching and observation forums *www.cloudynights.com*
- Astronomical League

Get feedback so you can improve!

Summary

- Basics – Explore further
- Practice makes perfect

And most importantly…..

Have fun and strive for accuracy!