

What's Up?

January 1-31, 2025

Made with the RASC Observer's Handbook, 2025 Night
Sky Almanac, Sky Safari®, and Stellarium®

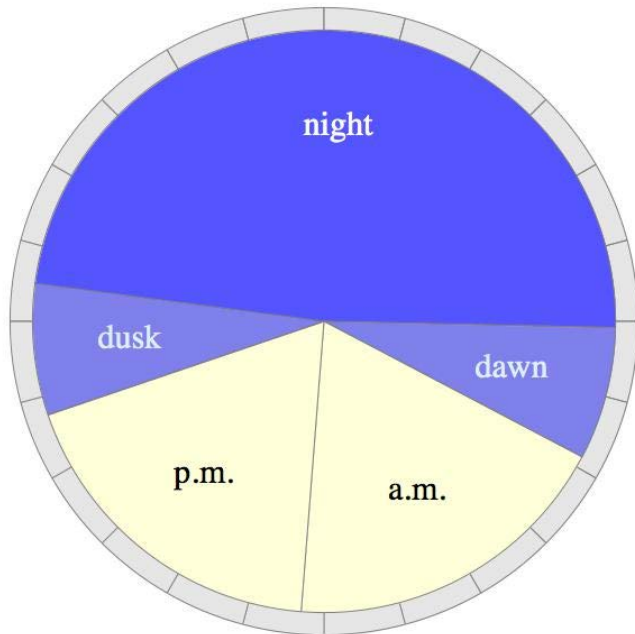
photo: David Hoskin

The Sun This Month

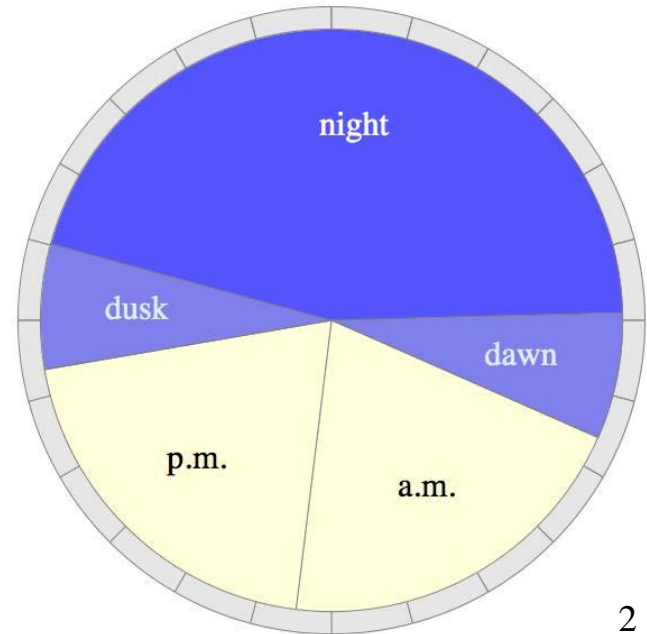
Solar Activity

Date	Sunset	Astronomical Twilight Ends	Darkness	Astronomical Twilight Begins	Sunrise	Transit "Noon"	Sunlight	Max Altitude
Jan 1	4:44 pm	6:30 pm	11.6 h	6:05 am	7:51 am	12:18 pm	8h 53m	22.4°
Jan 31	5:22 pm	7:02 pm	10.9 h	5:53 am	7:33 am	12:27 pm	9h 47m	28.2°

Halifax Jan 01



Halifax Jan 31



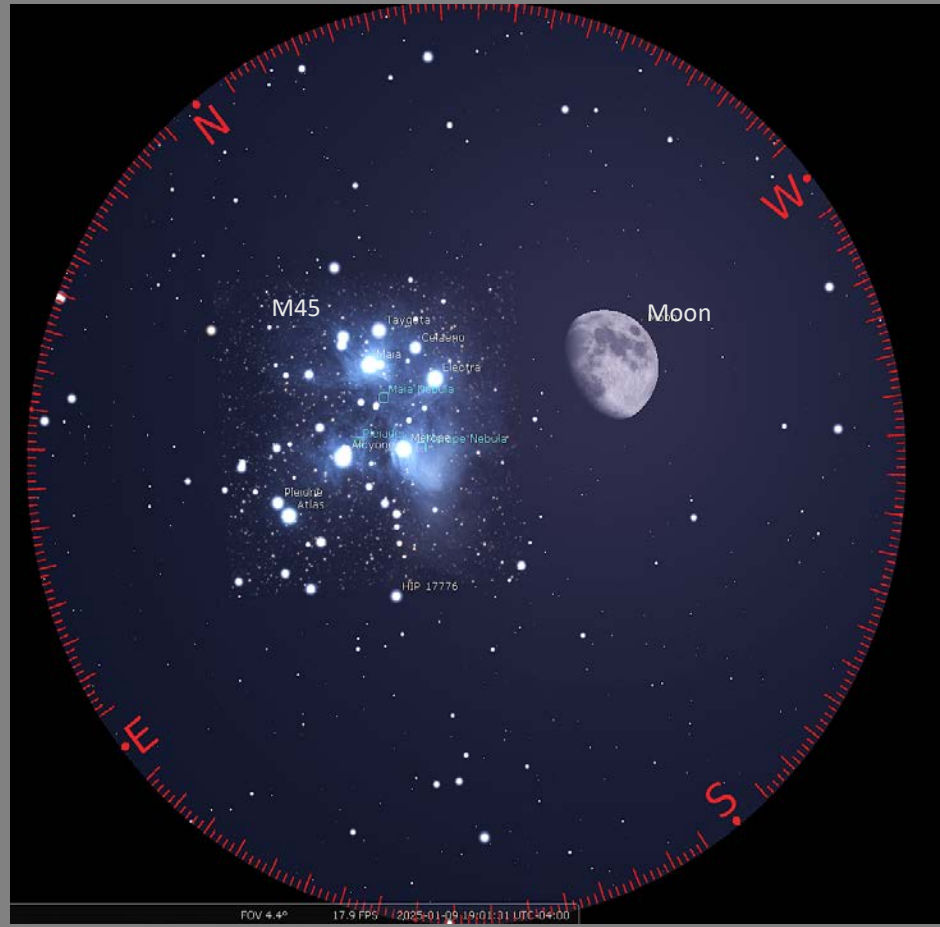
The Moon This Month

Date	Phase	English	Mi'kmaq
Jan 3	Moon near Venus		
Jan 3	Quadrantid Meteor Shower Peak		
Jan 4	Moon near Saturn		
Jan 6	<i>First Quarter</i>	Tom Cod Spawning	<u>Punamujuiku's</u>
Jan 7	Moon at perigee (370,200 km)		
Jan 9	Moon occults the Pleiades		
Jan 10	Moon near Jupiter		
Jan 13	<i>Full Moon</i>		
Jan 13	Moon occults Mars		
Jan 14	Moon near the Beehive Cluster		
Jan 20	Moon at apogee (404,300 km)		
Jan 21	<i>Last Quarter</i>		
Jan 29	<i>New Moon</i>	Snow-Blinding	<u>Apuknajit</u>
Jan 31	Moon near Saturn		



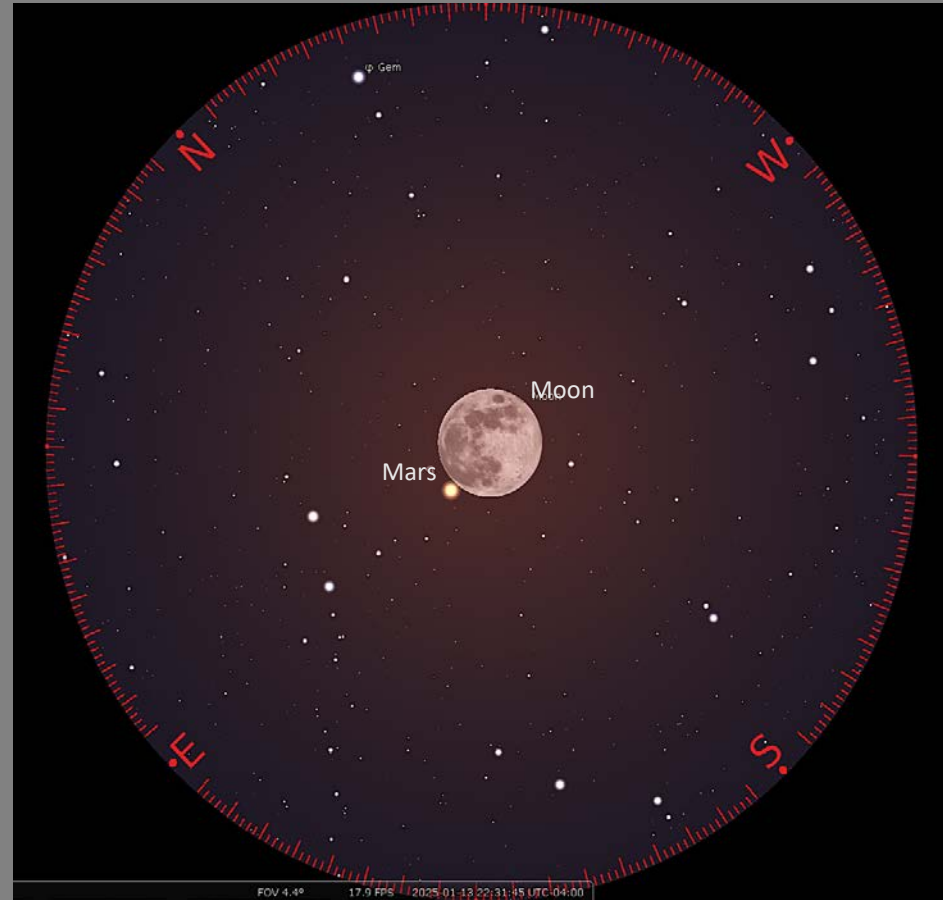
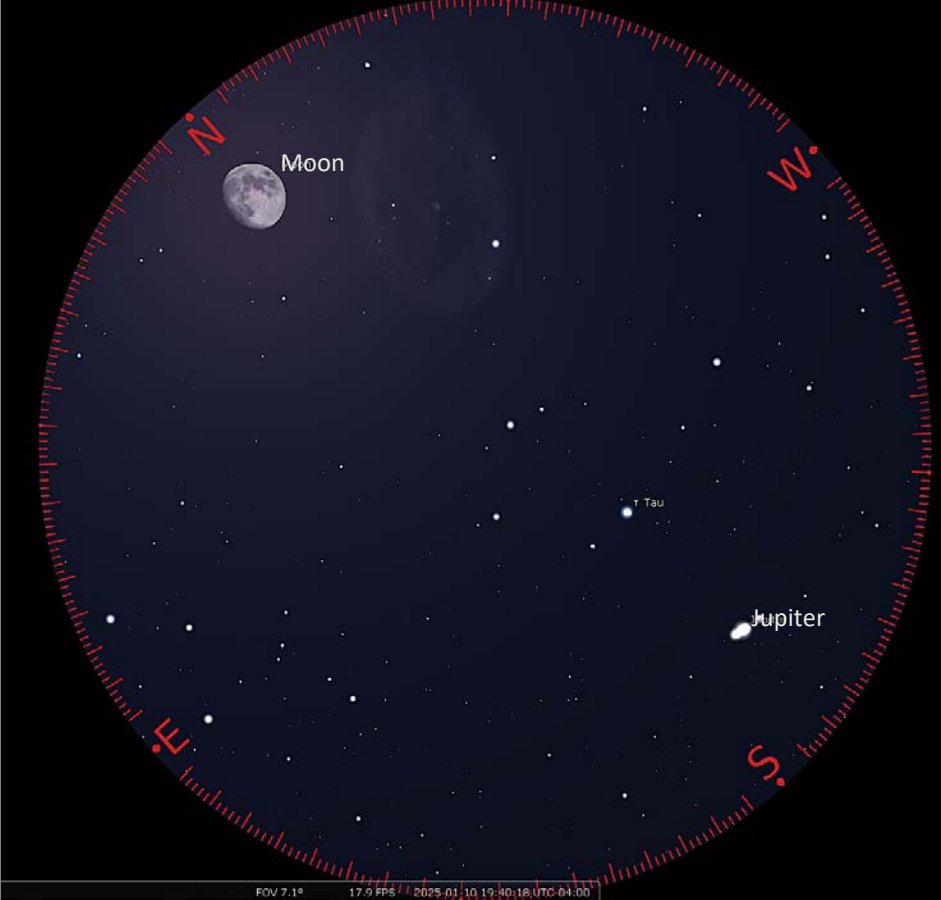
Jan 3

- Moon and Venus
- around 6:00 p.m.
- 7x50 binoculars (7.1° FOV)



Jan 9

- Moon occults M45
- around 7:00 p.m.
- 15x70 binoculars (4.4° FOV)

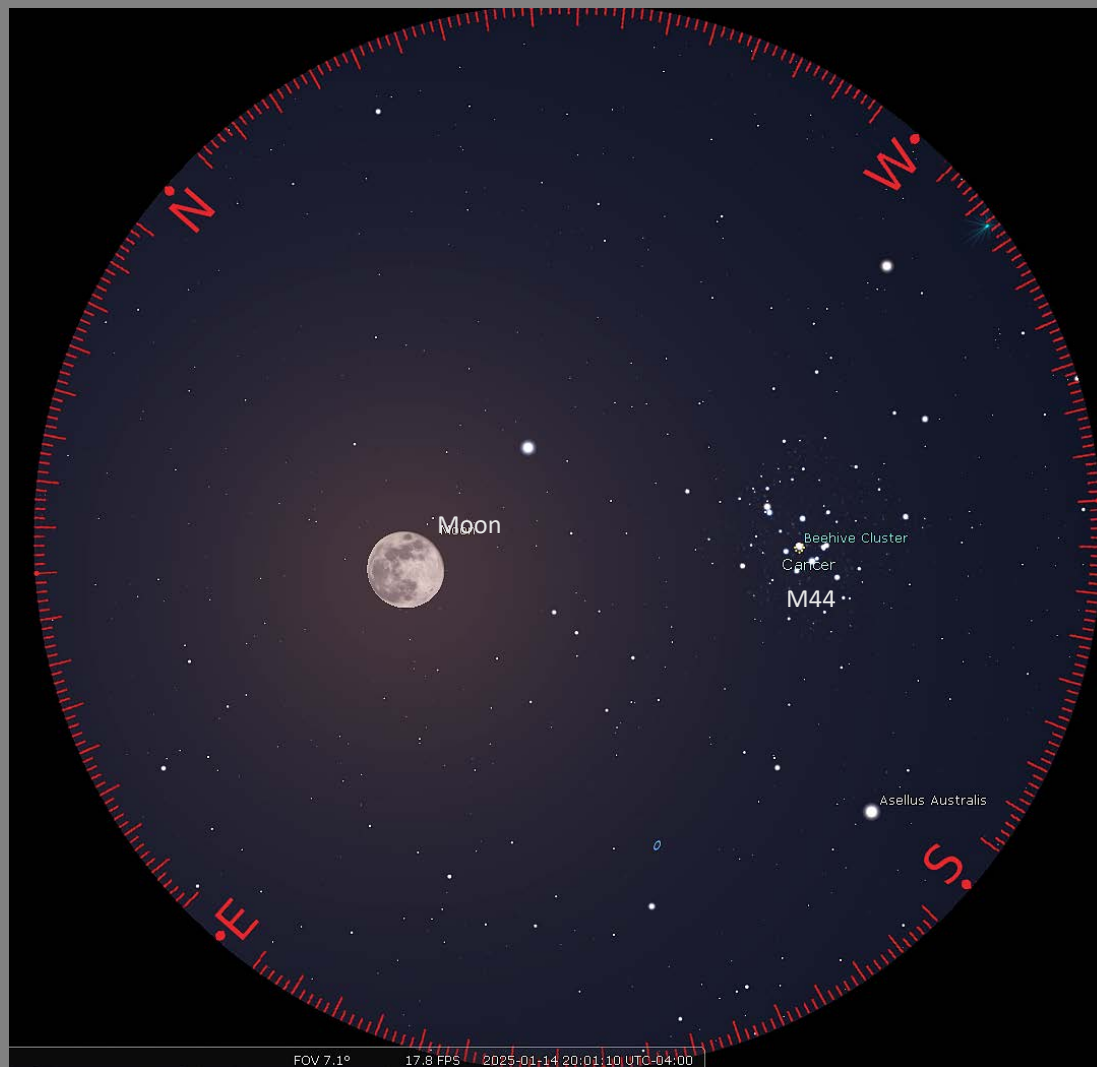


Jan 10

- Moon and Jupiter
- around 7:30 p.m.
- 7x50 binoculars (7.1° FOV)

Jan 13

- Moon occults Mars
- around 10:30 p.m.
- 15x70 binoculars (4.4° FOV)

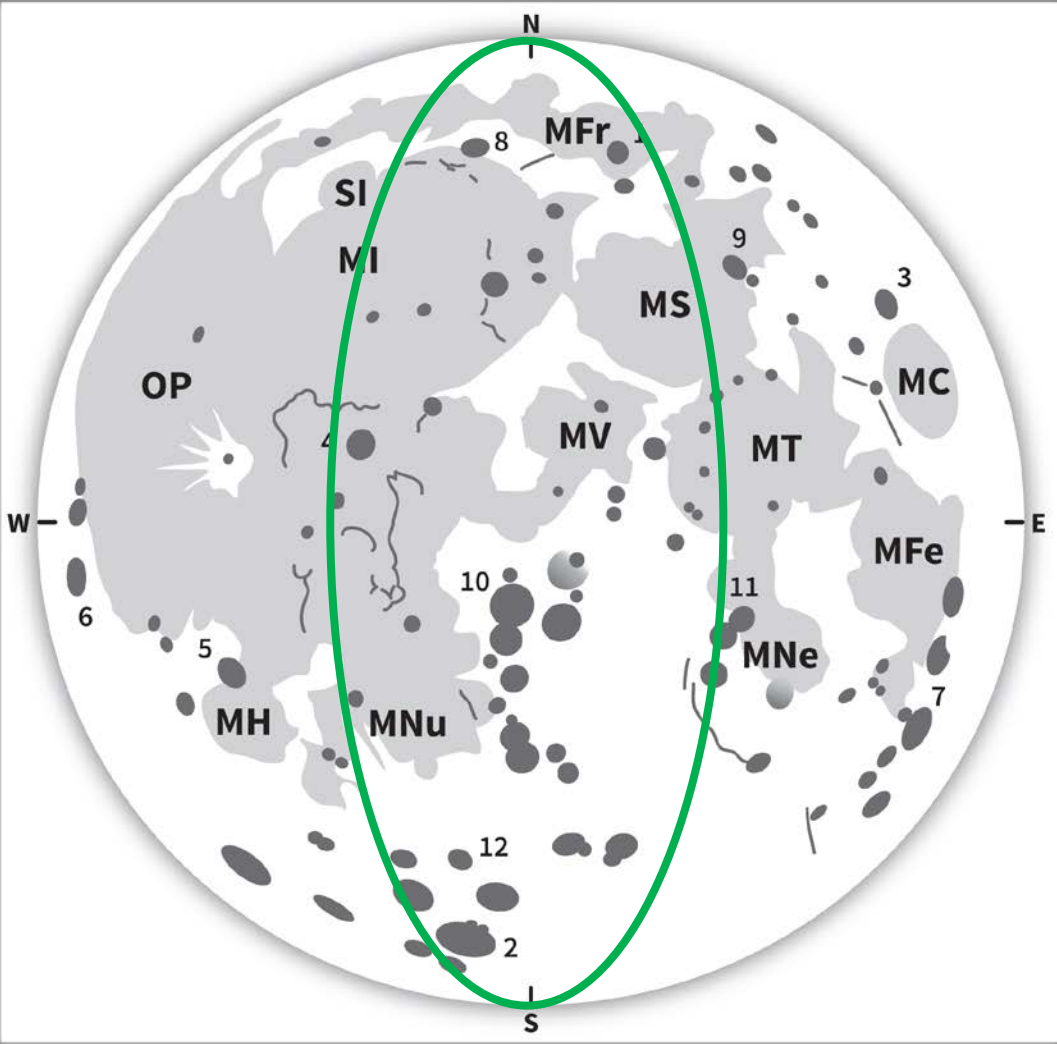


Jan 14

- Moon near M44
- around 10:00 p.m.
- 7x50 binoculars (7.1° FOV)

MARE

- MC: Mare Crisium
- MFe: Mare Fecunditatis
- MFr: Mare Frigoris
- MH: Mare Humorum
- SI: Sinus Iridum
- MI: Mare Imbrium
- MNe: Mare Nectaris
- MNu: Mare Nubium
- MS: Mare Serenitatis
- MT: Mare Tranquillitatis
- MV: Mare Vaporum
- OP: Oceanus Procellarum

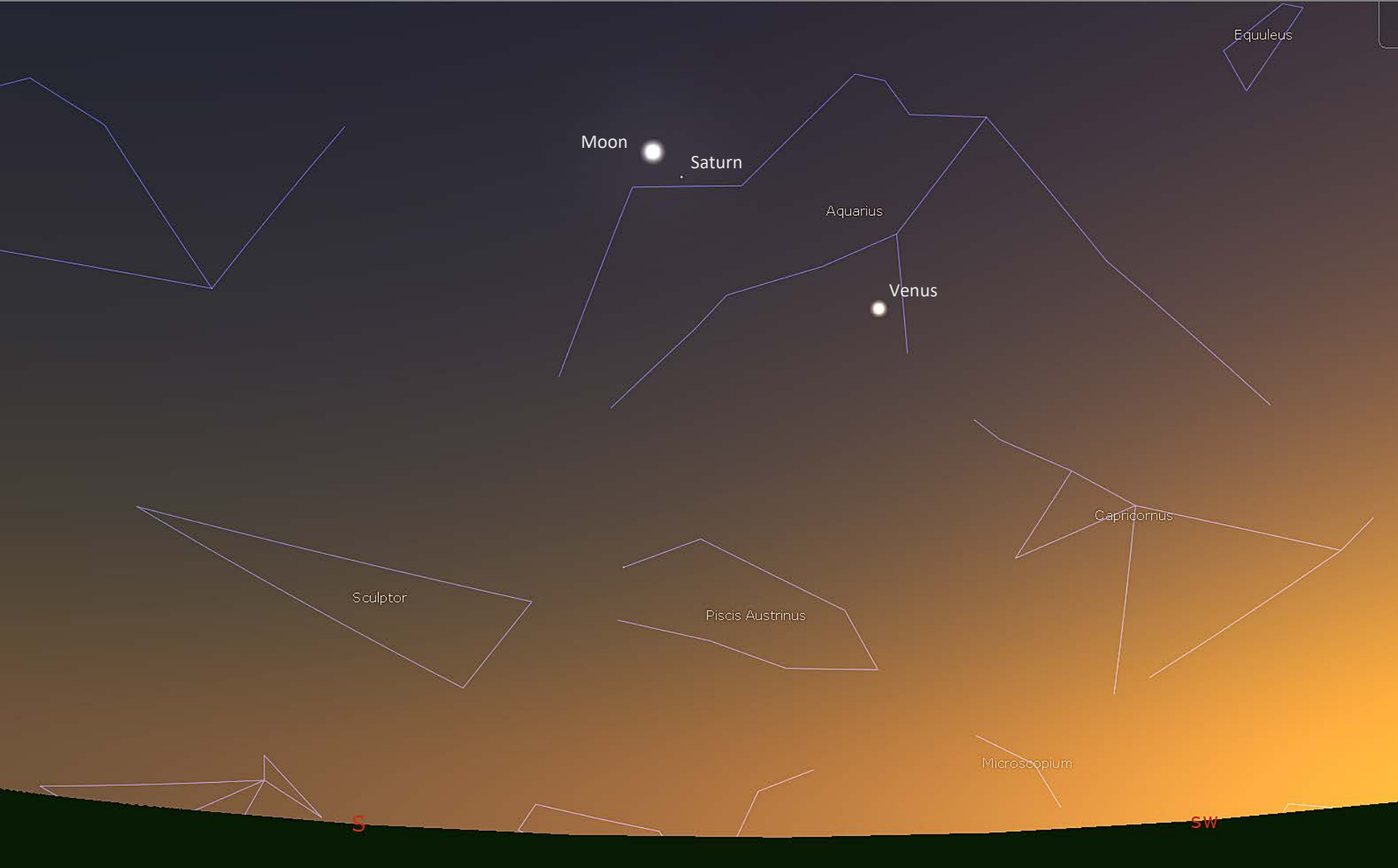


- CRATERS
- | | | |
|----------------|---------------|----------------|
| 1. Aristoteles | 5. Gassendi | 10. Ptolomaeus |
| 2. Clavius | 6. Grimaldi | 11. Theophilus |
| 3. Cleomedes | 7. Petavius | 12. Tycho |
| 4. Copernicus | 8. Plato | |
| | 9. Posidonius | |

First Quarter: Jan 18

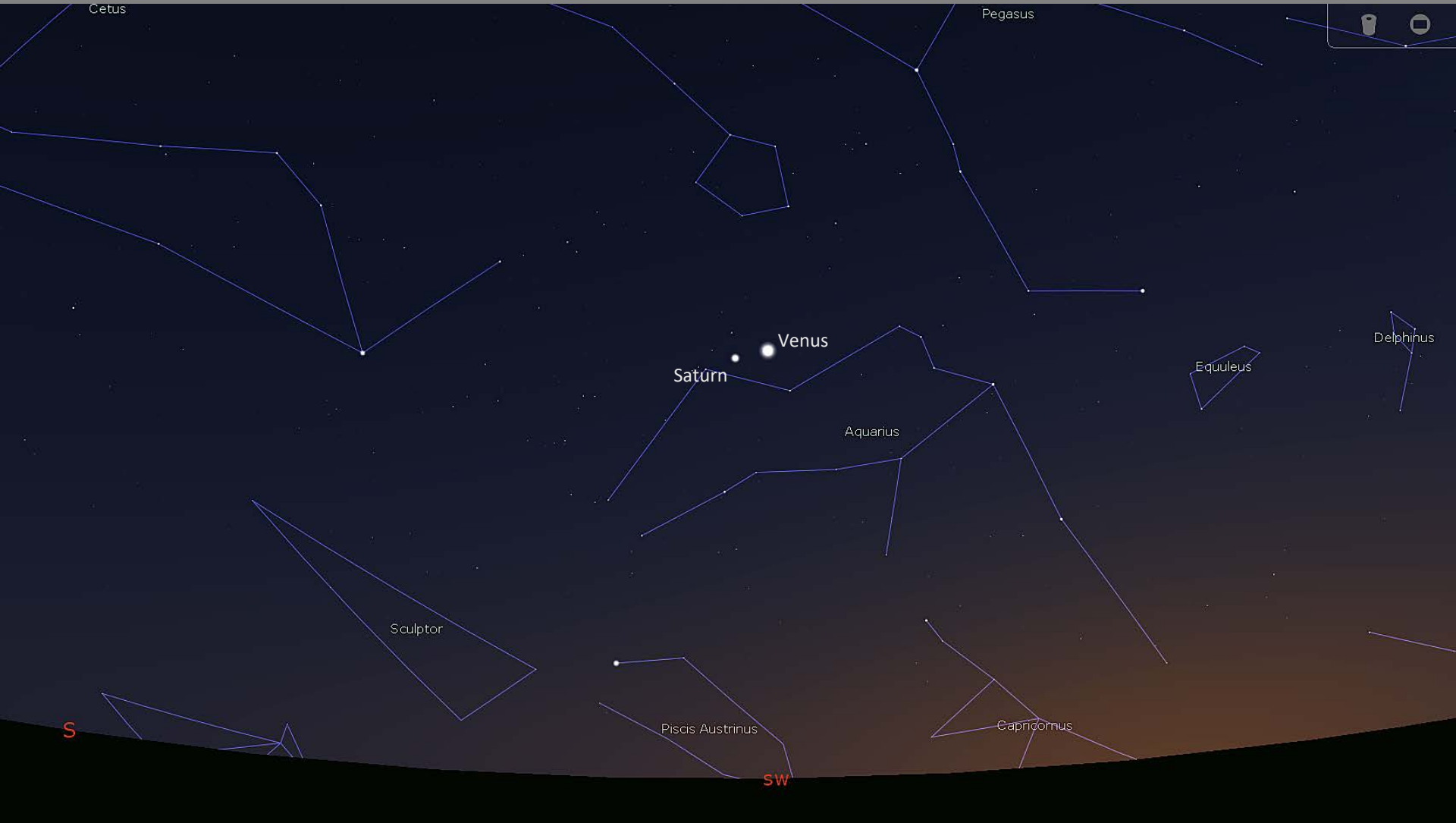
The Moon in
Explore the Universe
observe 3 of each in binos

challenge



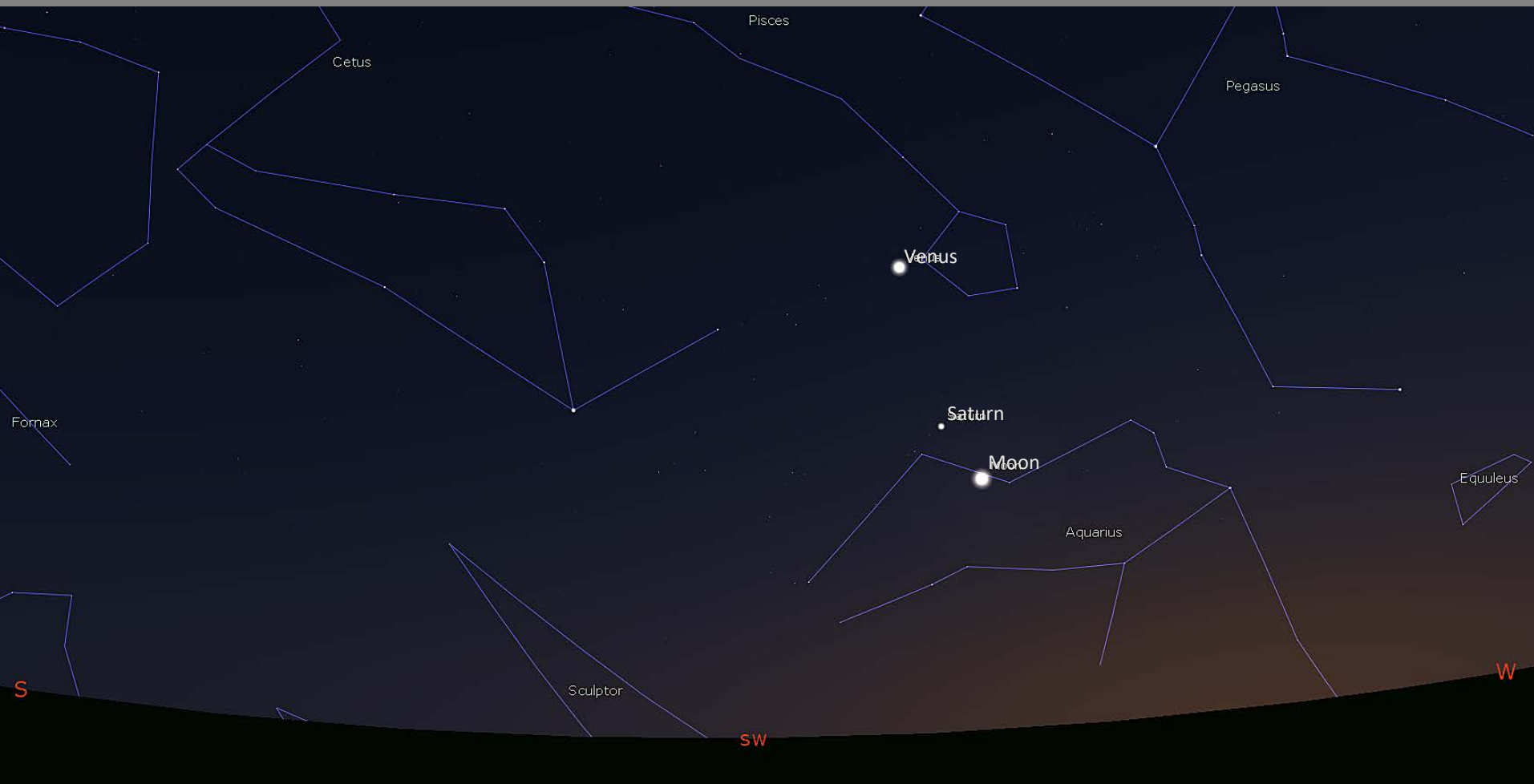
Jan 4 around 5:30 p.m.

-waxing crescent Moon, Saturn and Venus widefield photo-op



Jan 17 around 6:00 p.m.

- Venus conjunction with Saturn
- widefield photo-op



Jan 31 around 6:30 p.m.

-waxing crescent Moon, Saturn and Venus widefield photo-op

The Quadrantid Meteor Shower

- Quadrantid radiant is in Bootes; predicted peak Jan 3 at 3 pm AST
- up to 120 meteors per hour at the peak lasting 6 hours; look before dawn
- waxing crescent Moon sets a few hours after sunset on Jan 2 so a dark sky will allow fainter meteors to be seen
- look for fireballs that are often seen in this meteor shower



Explore the Universe:

Winter Constellations

Auriga

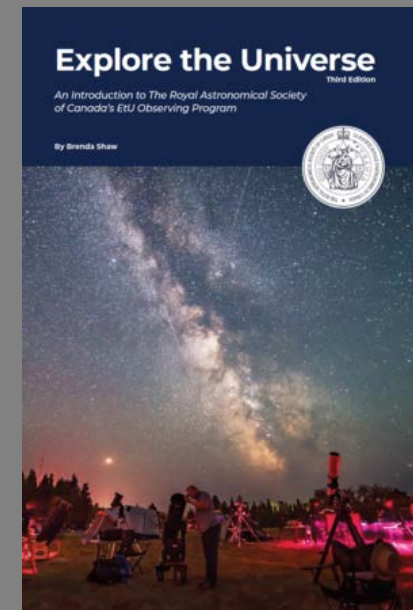
Gemini

Taurus

Orion

Canis Major

Canis Minor





Explore the Universe:

Winter Stars

Ranking:

#1 Sirius (N)

#6 Capella (N)

#7 Rigel (N)

#8 Procyon (N)

#10 Betelgeuse (N)

#13 Aldebaran (N)

#16 Pollux (N)

#45 Castor

Gomiesa

N = Navigation

all good for Syn Scan alignment

Explore the Universe: Winter Deep-Sky Objects

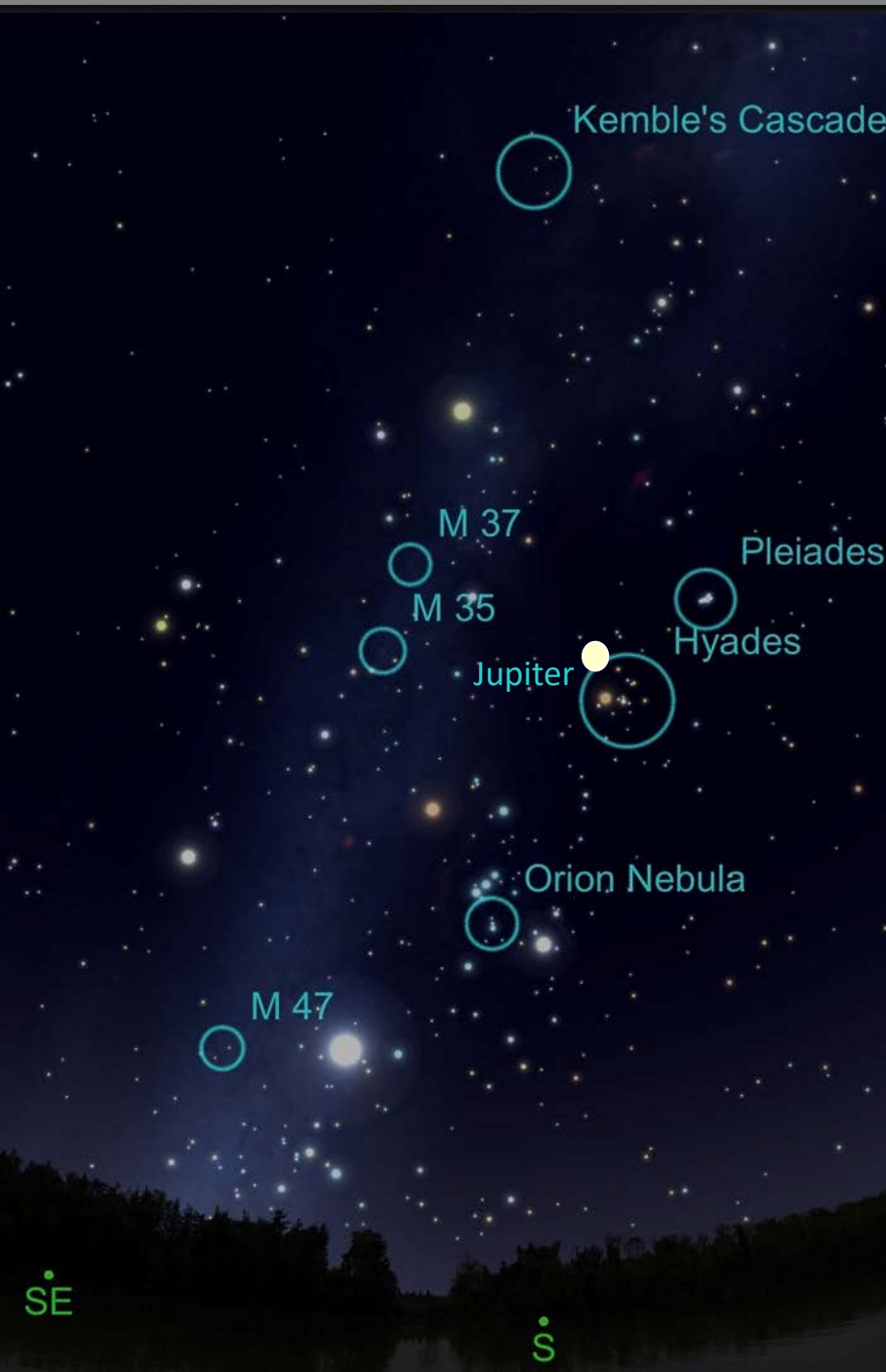


photo: David Hoskin



challenge



Explore the Universe: Winter Double Stars

Delta Cephei (3.5-4.4, 7.5, 41")
Cepheid variable star prototype

Period is 5.366 days

Delta Cep A (white-yellow)

Delta Cep C (blue)



photo: A Ayiomamitis

challenge

Questions?
observing@halifax.rasc.ca

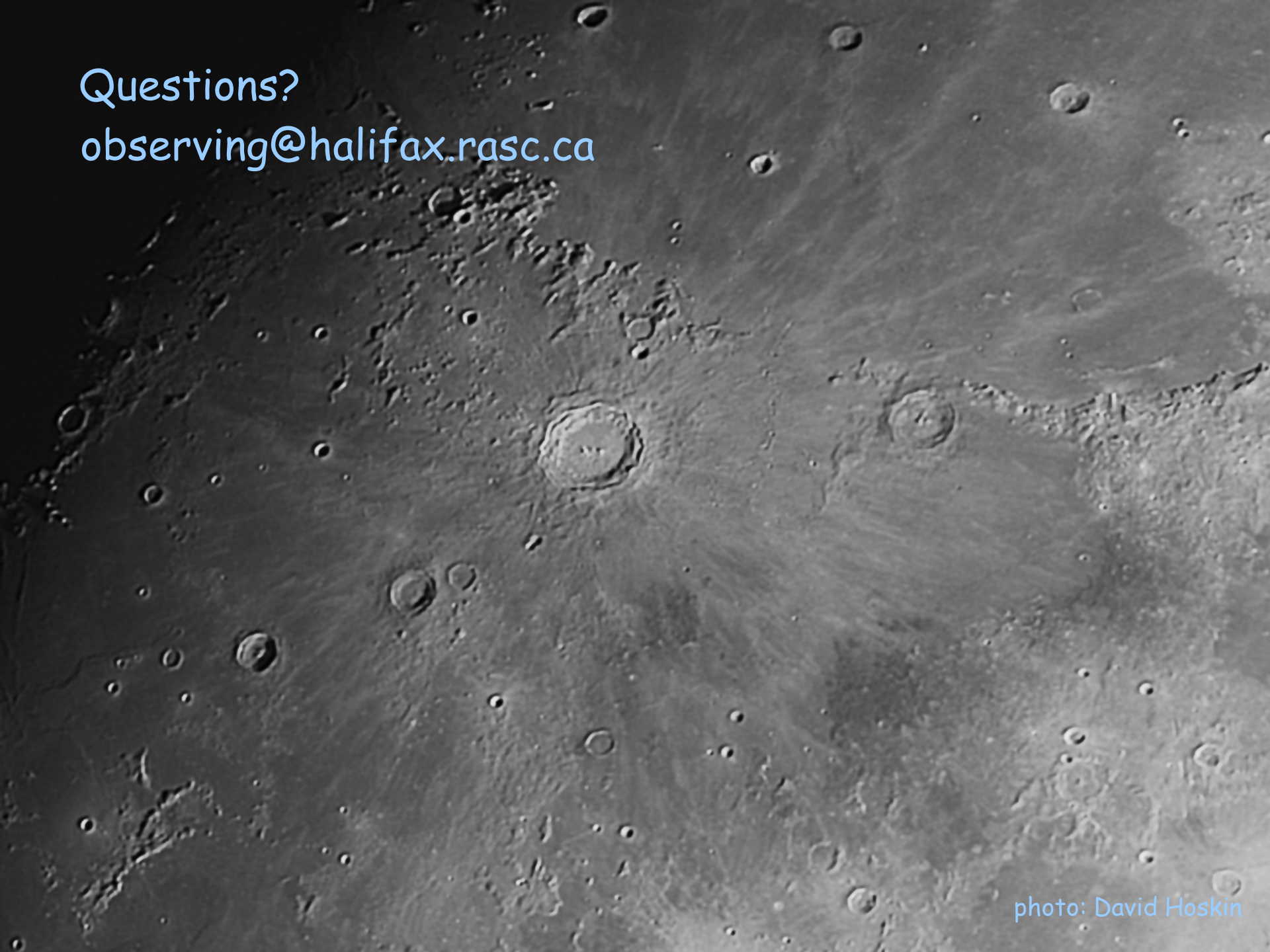


photo: David Hoskin