

What's Up?

February 1-28, 2024

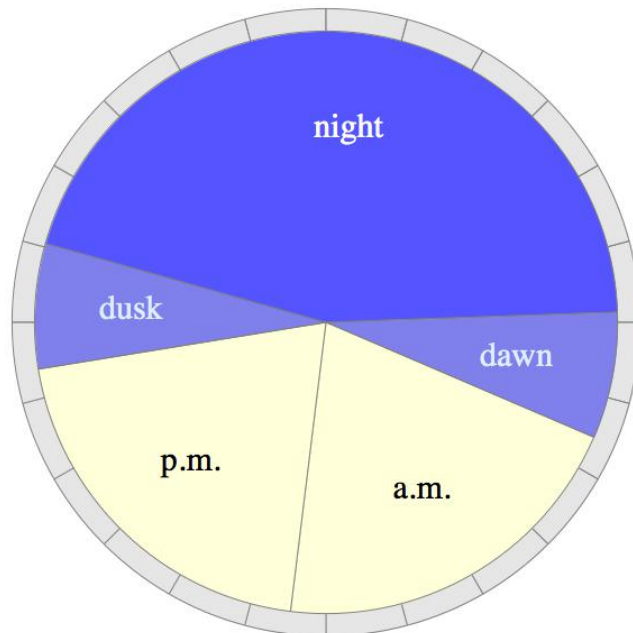
Made with the RASC Observer's Handbook, 2024 Night
Sky Almanac, Sky Safari®, and Stellarium®

The Sun This Month

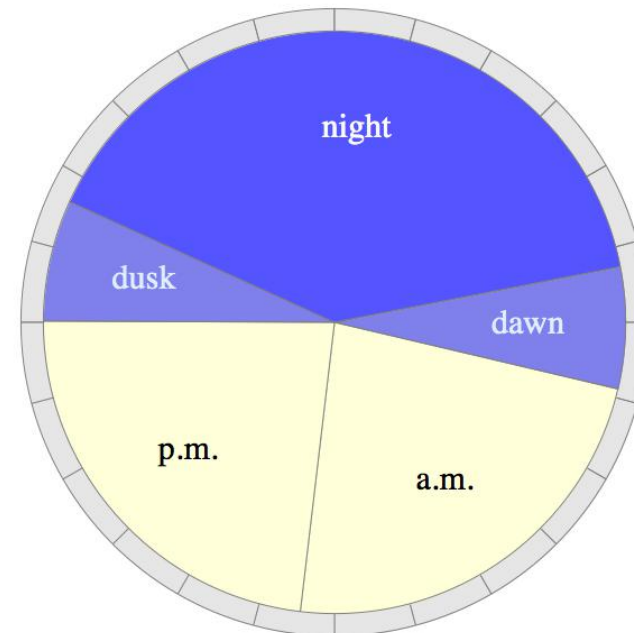
Solar Activity

Date	Sunset	Dusk End	Darkness	Dawn Start	Sunrise	“Noon”	Sunlight	Max Altitude
Feb 1	5:22 pm	7:02 pm	10 $\frac{3}{4}$ h	5:53 am	7:33 am	12:27 pm	9 $\frac{3}{4}$ h	28°
Feb 28	6:01 pm	7:38 pm	9 $\frac{1}{2}$ h	5:15 am	6:52 am	12:26 pm	11 $\frac{1}{4}$ h	38°

Halifax Feb 01

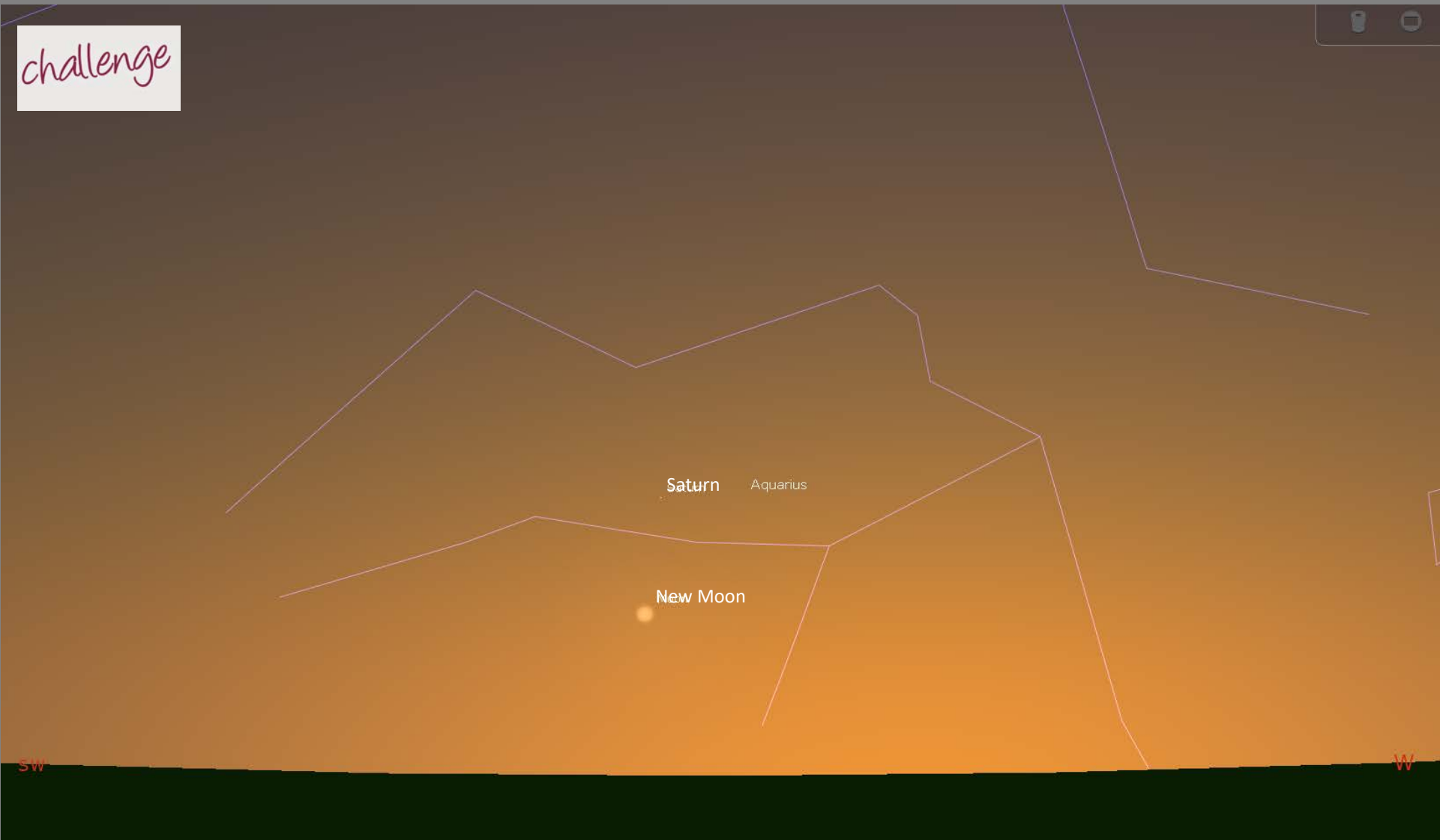


Halifax Feb 28



The Moon This Month

Date	Phase	English	Mi'kmaq
Feb 2	<i>Last Quarter</i>	Tom Cod Spawning	<u>Punamujuiku's</u>
Feb 7	Moon near Venus		
Feb 9	<i>New Moon</i>	Snow-Blinding	<u>Apuknajit</u>
Feb 10	Moon at perigee (358,100 km)		
Feb 15	Moon near Uranus & Jupiter		
Feb 16	<i>First Quarter</i>		
Feb 16	Moon near the Pleiades		
Feb 24	<i>Full Moon</i>		
Feb 25	Moon at apogee (406,300 km)		



On Feb 10 at 5:55 p.m. after sunset look for the young Moon, which will be about 23 hours old and 5.5° above the horizon



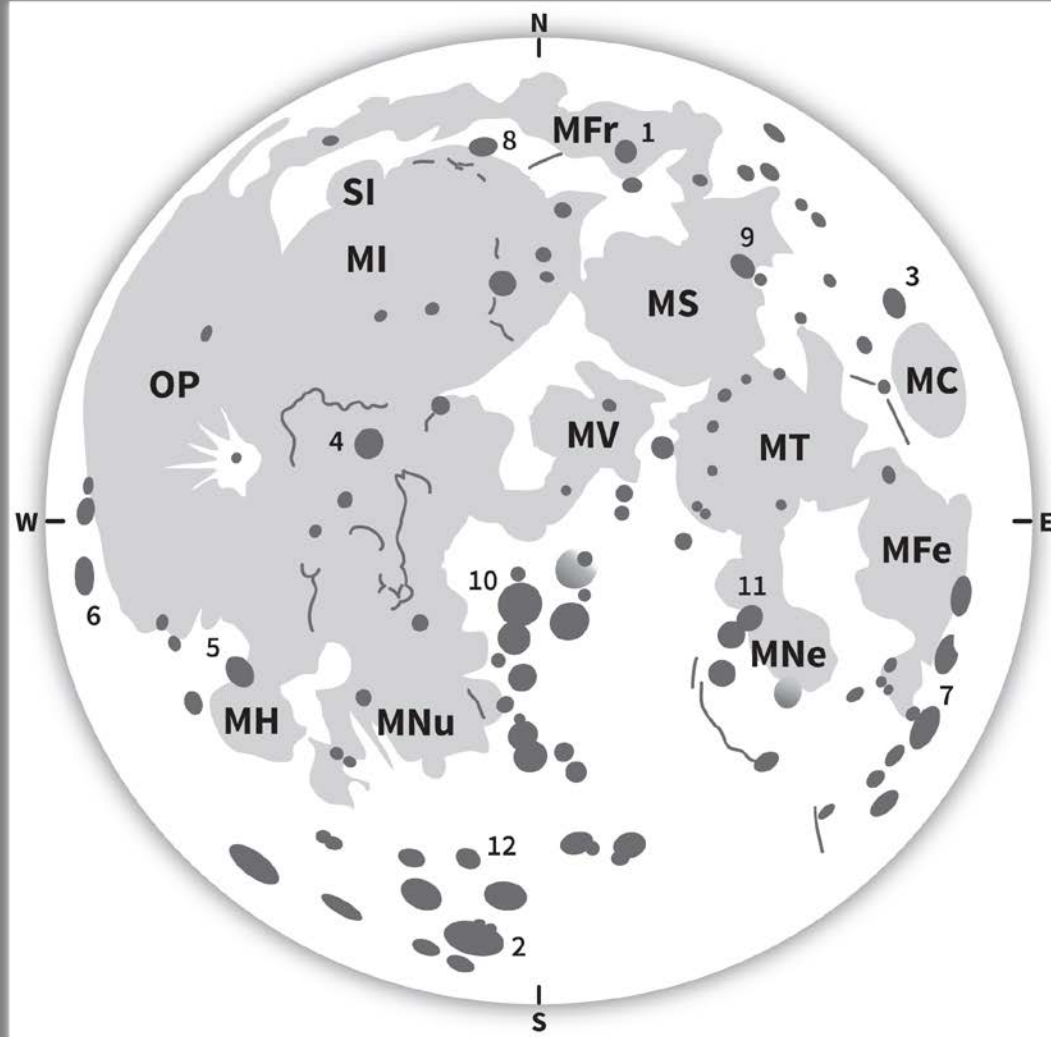
Feb 15

- Moon and Uranus
- around 8:00 p.m.
- 15x70 binoculars (4.4° FOV)



Feb 16

- Moon and the Pleiades
- around 10:00 p.m.
- 15x70 binoculars (4.4° 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

2. Clavius

3. Cleomedes

4. Copernicus

5. Gassendi

6. Grimaldi

7. Petavius

8. Plato

9. Posidonius

10. Ptolomaeus

11. Theophilus

12. Tycho

challenge

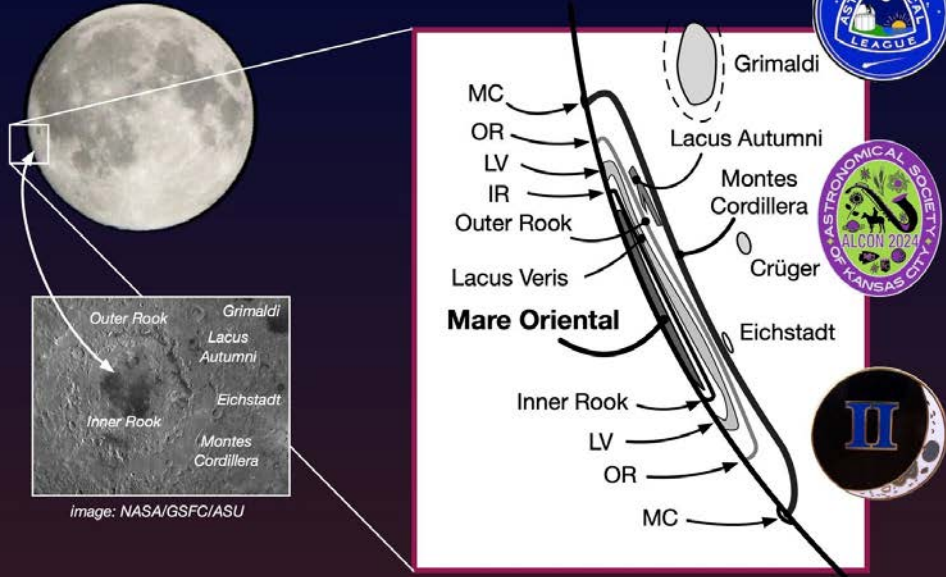
The Moon in Explore the Universe

Feb 14-18

observe 3 of each in binos

Exploring the moon!

Mare Orientale

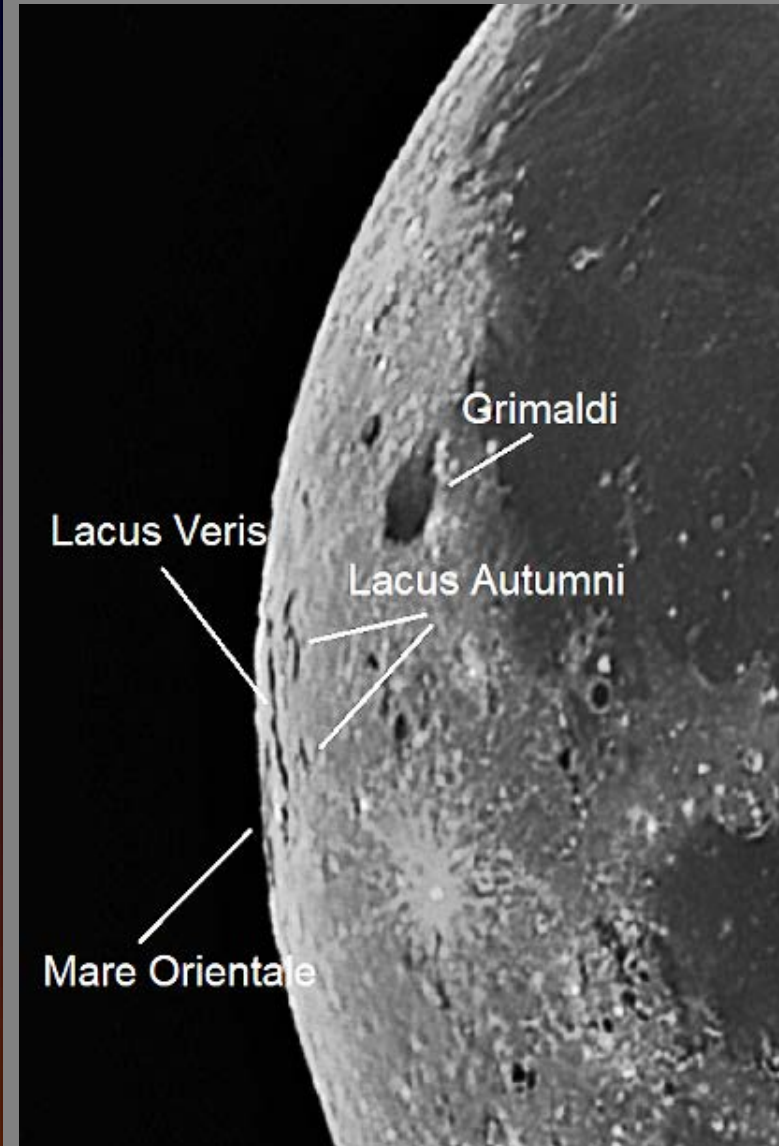


A good viewing of the very intriguing Mare Orientale requires that the moon be at or near maximum western libration. This happens on three, four, or five days in some, but not all months. Of course, it should not hide in the lunar night, which immediately eliminates fifteen days each month. The three mornings leading up to new moon are also poor times because the waning thin crescent lies too close to the horizon to give a sharp enough image for clear, meaningful view.

As a result, opportunities for studying Mare Orientale are infrequent, occurring around twenty days each year. Generally, four or five months running present three, four, or five good opportunities followed by a string of nine or ten months that have no suitable occasions for viewing it. And then there is the weather!

Identifying Orientale's fascinating features demands steady seeing and moderate to high magnification.

Good mornings in 2024 to try observing Mare Orientale are February 1, 2, 3, and 4, March 2, 3, and 4.



The Planets in February

Mercury-visible before sunrise low in the SE (mag. -0.7) until mid-month

Venus -prominent in the SE during morning twilight (mag. -4.0)

Mars -low in the SE before sunrise (mag. 1.3) at the start of the month
-tight conjunction with Venus on Feb 22

Jupiter -high in the sky at the start of evening twilight (mag. -2.4)
-near the waxing crescent Moon on Feb 15

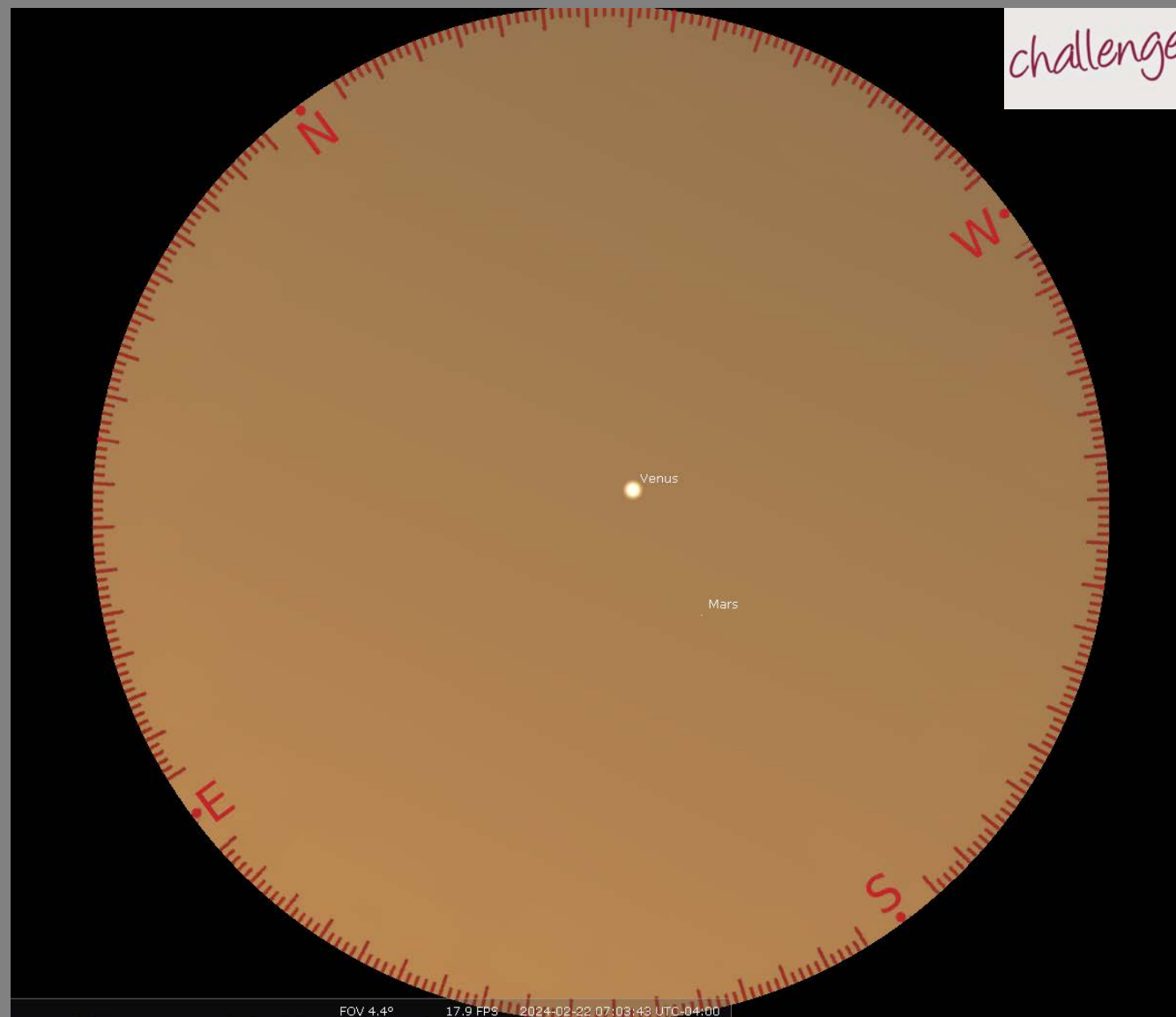
Saturn -visible low in the WSW at evening twilight (mag. 0.9) until mid-month
-conjunction with the Sun on Feb 28

Uranus -visible in the evening sky (mag. 5.7) in Aries
-close to the waxing crescent Moon on Feb 15

Neptune-low in the west at sunset (mag. 8.0) as it approaches solar conjunction

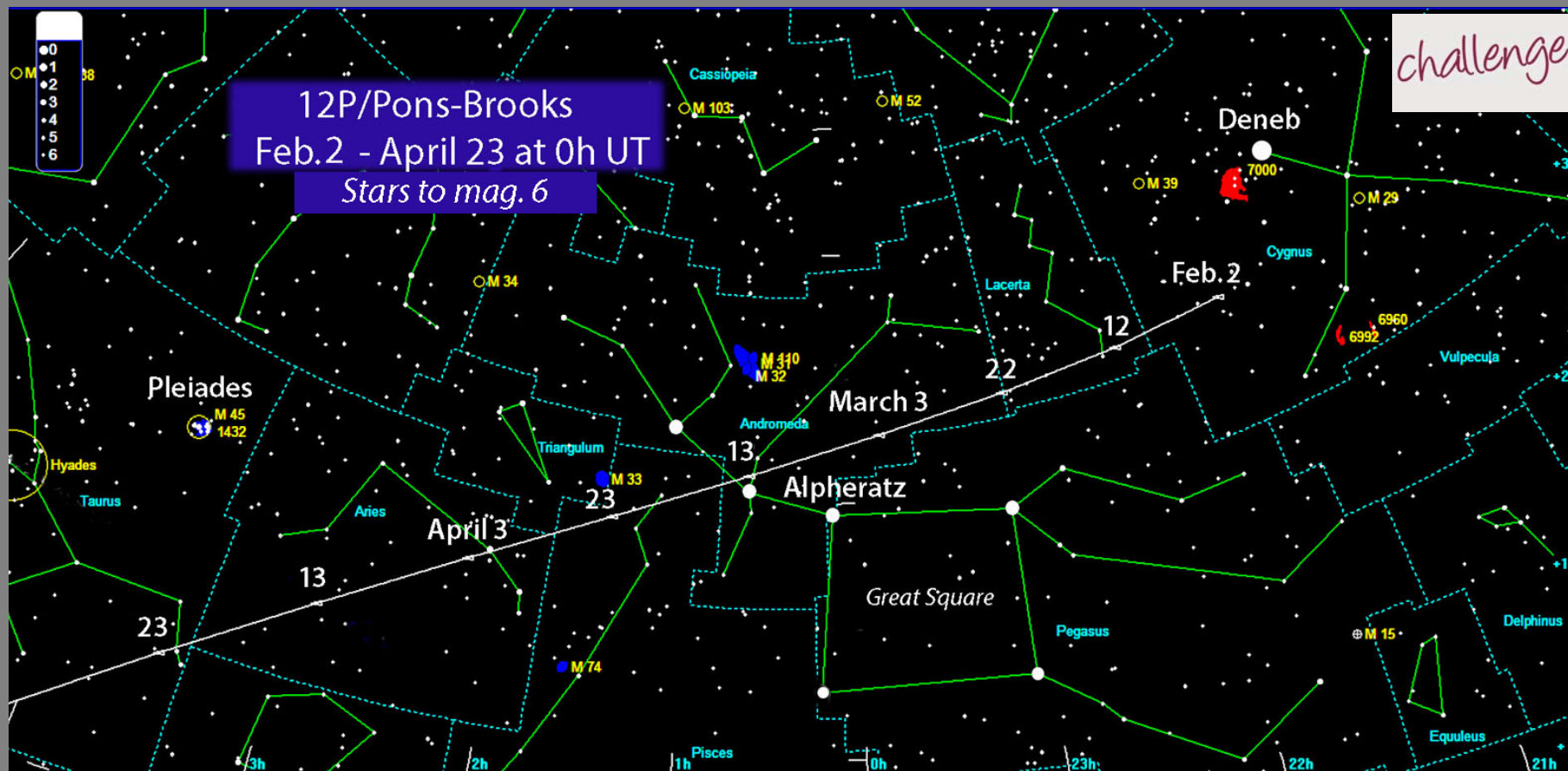


Feb 15 early evening, Jupiter is close to the waxing crescent Moon
Nice DSLR widefield photo opportunity



Feb 22

- Venus and Mars conjunction at 7 a.m.
- 15x70 binoculars (4.4° FOV)



Sky & Telescope Magazine

Look for Comet 12P/Pons-Brooks (mag. 8) after nightfall or just before sunrise

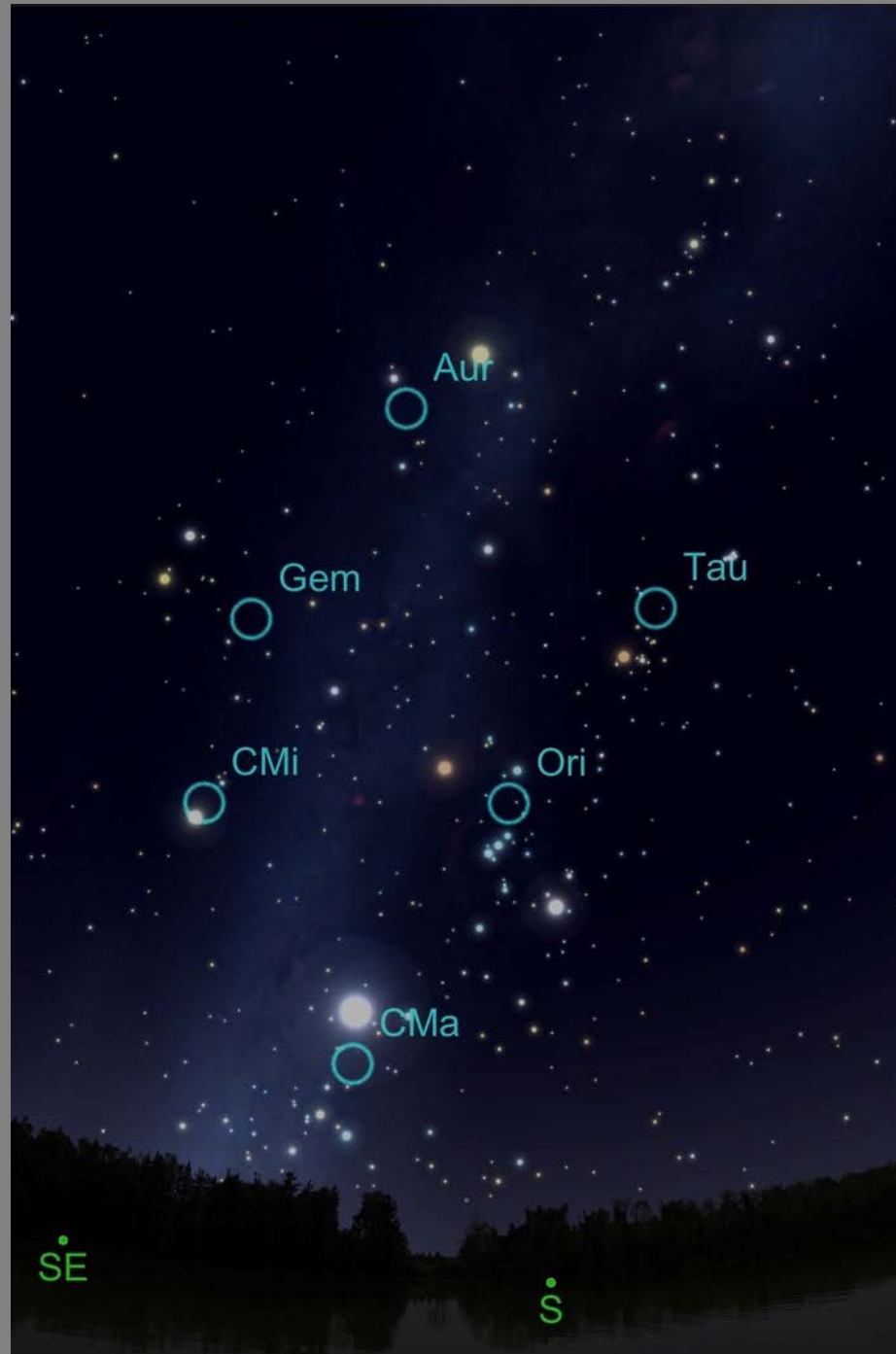


Zodiacal Light

- pyramid of light in the western sky just after the end of twilight (February, March) or in the eastern sky just before the start of morning twilight (September, October)
- best seen when the ecliptic is at a high angle relative to the horizon
- requires a dark observing site with no moonlight
- dust concentrated in the plane of the ecliptic and towards the Sun reflects sunlight



13 March 2021 @ 8:45 pm near Nine Mile River



Explore the Universe:

Winter Constellations

Auriga

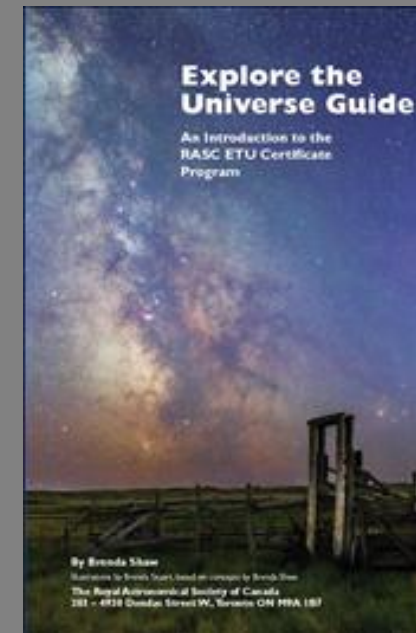
Gemini

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)

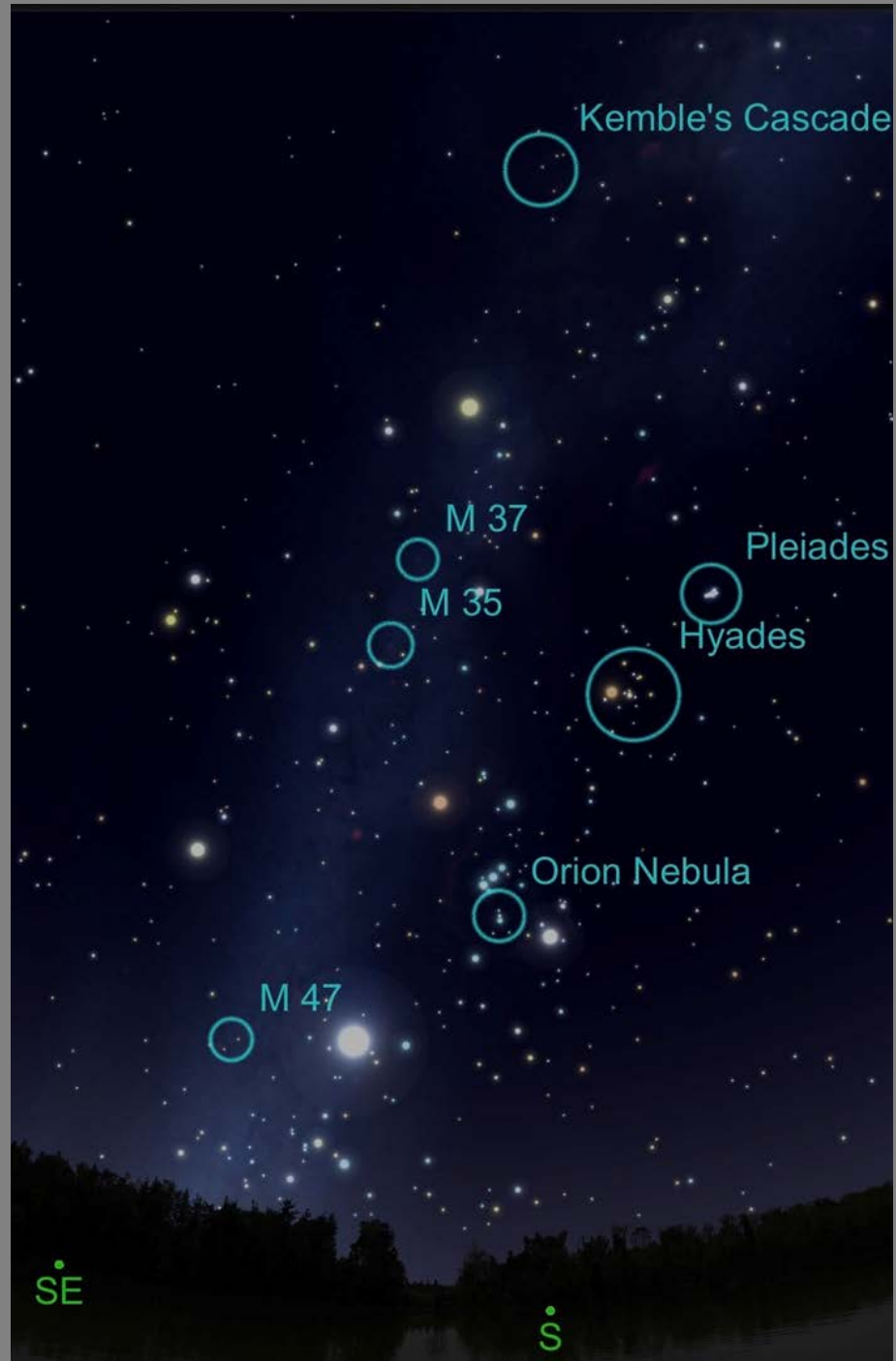
#16 Pollux (N)

#45 Castor

Gomeisa

N = Navigation

all good for Syn Scan alignment



Explore the Universe: Winter Deep-Sky Objects



Pleiades (Messier 45)



Messier 35 (+ NGC 2158)

Halifax, NS

28 February 2023@10 pm



Explore the Universe: Double Stars

17 Com (5.2, 6.6, 146")

Multiple star system

Look in the Coma Star Cluster

17 Com A (blue)

17 Com B (blue-white)



Questions?



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