

What's Up?

December 1-31, 2023

Made with the 2023 RASC Observer's Handbook, 2023
Night Sky Almanac, Sky Safari®, and Stellarium®

photo: David Hoskin

The Sun This Month

[Today's Solar Activity](#)

Date	Sunset	Dusk End	Darkness	Dawn Start	Sunrise	“Noon”	Daylight	Max Altitude
Dec 1	4:35 p.m.	6:19 p.m.	11.5 h	5:46 a.m.	7:30 a.m.	12:03 p.m.	9.1 h	23.6°
Dec 31	4:43 p.m.	6:29 p.m.	11.6 h	6:05 a.m.	7:51 a.m.	12:17 p.m.	8.9 h	22.3°

Halifax Dec 01



Winter Solstice

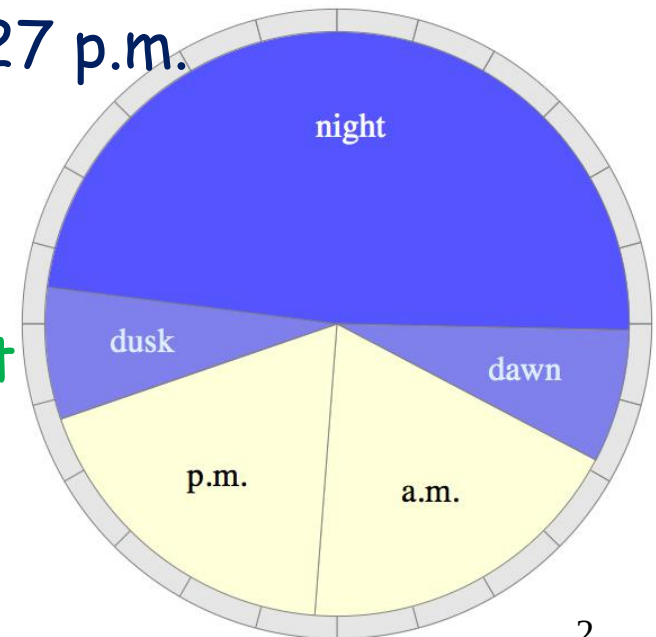
21 December at 11:27 p.m.

Earliest sunset

4:33 p.m.

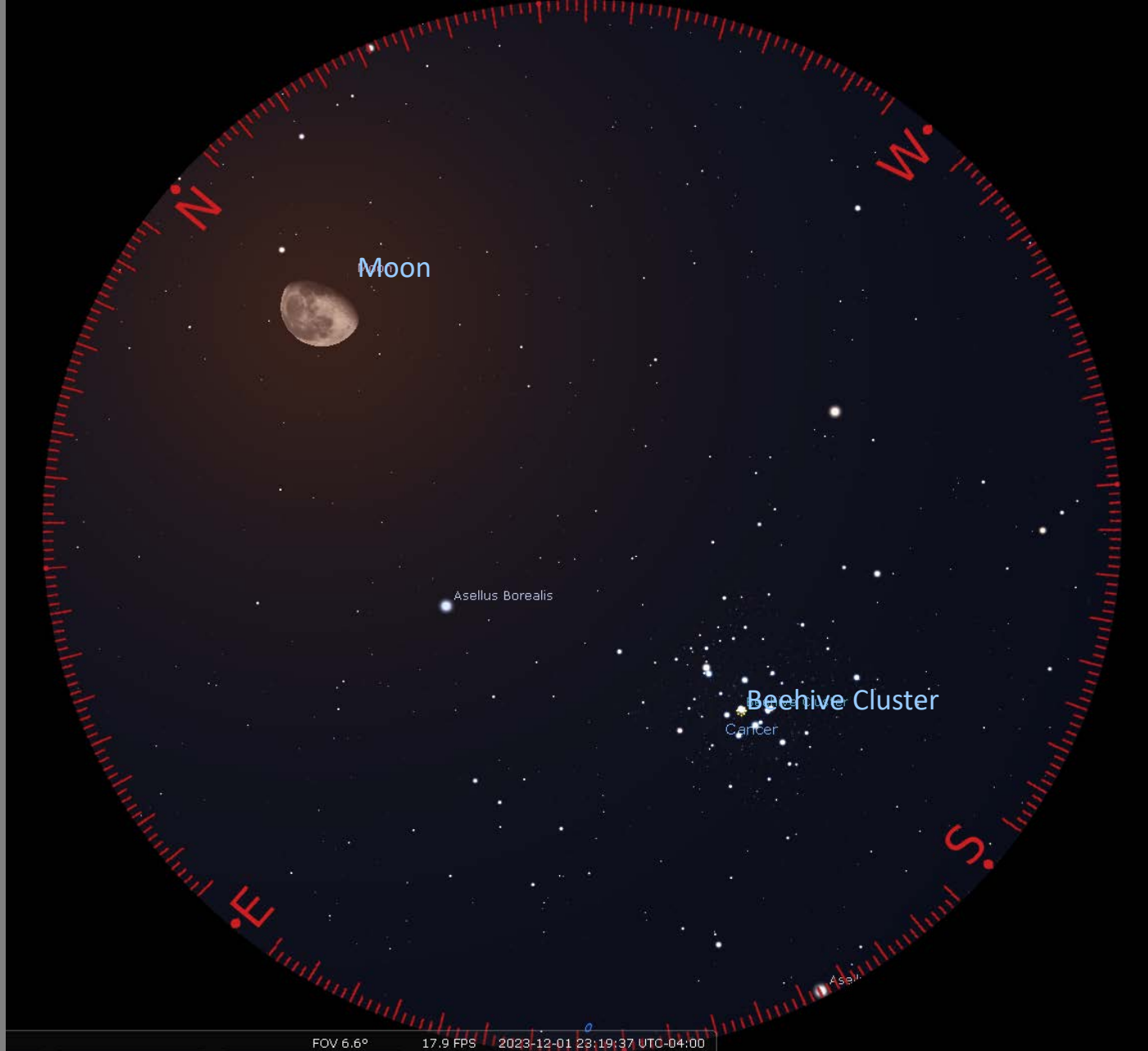
Dec 7-12

Halifax Dec 31



The Moon This Month

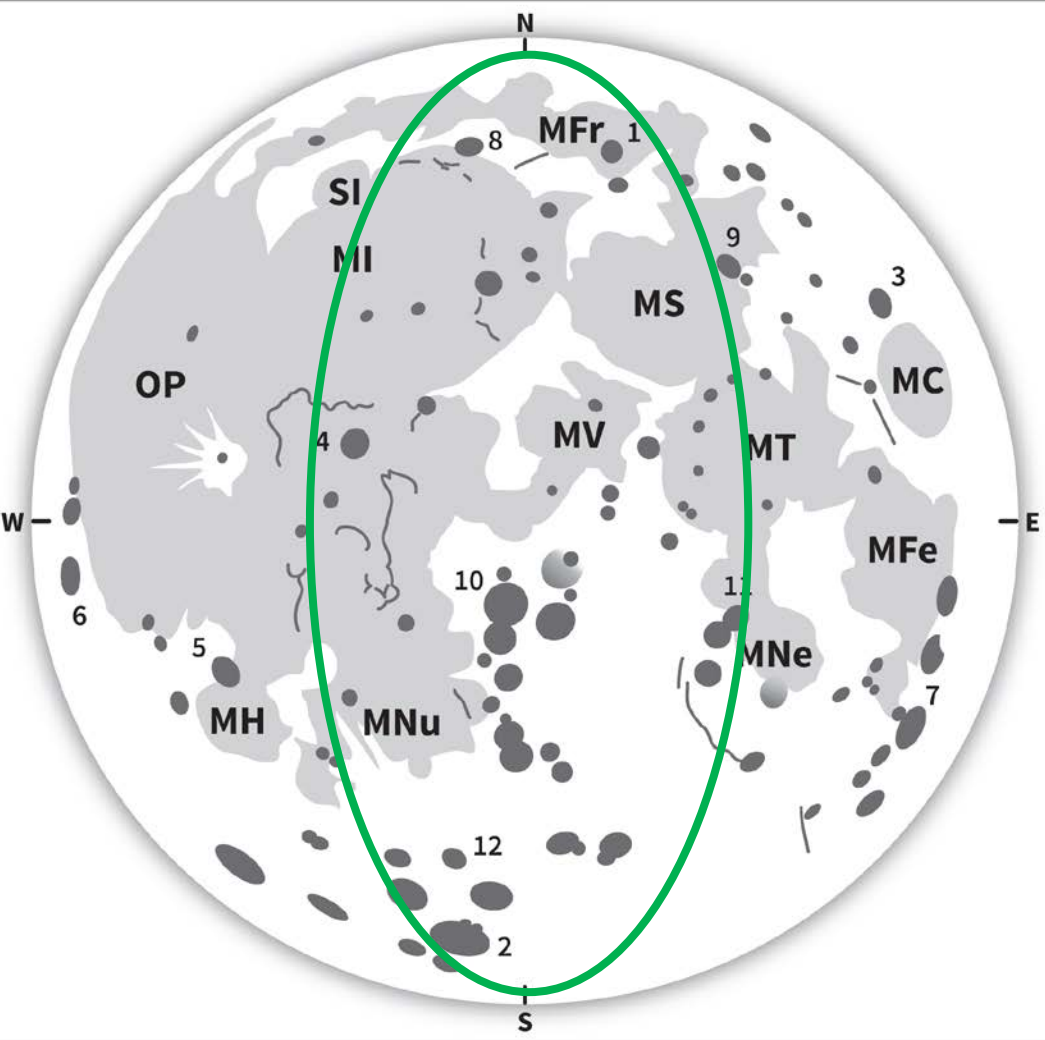
Date	Phase	English	Mi'kmaq
Dec 1	Moon near the Beehive Cluster		
Dec 4	Moon at Apogee		
Dec 5	<i>Last Quarter</i>	Rivers Freezing Over	<u>Keptekewiku's</u>
Dec 9	Moon near Venus		
Dec 12	<i>New Moon</i>	Winter/Chief Moon	<u>Kesikewik'us</u> or Kjiku's
Dec 14	Geminid Meteor Shower Peak		
Dec 16	Moon at Perigee		
Dec 17	Moon near Saturn		
Dec 19	<i>First Quarter</i>		
Dec 21-22	Moon near Jupiter		
Dec 23	Moon near the Pleiades		
Dec 22	Ursid Meteor Shower Peak		
Dec 26	<i>Full Moon</i>		



Dec 1 @ 11:30 p.m. (7x50 binoculars)



Dec 9 @ 5:30 a.m. (7x50 binoculars)



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

December 17-21

The Moon in

Explore the Universe

observe 3 of each in binoculars⁶

CRATERS

1. Aristoteles

2. Clavius

3. Cleomedes

4. Copernicus

5. Gassendi

6. Grimaldi

7. Petavius

8. Plato

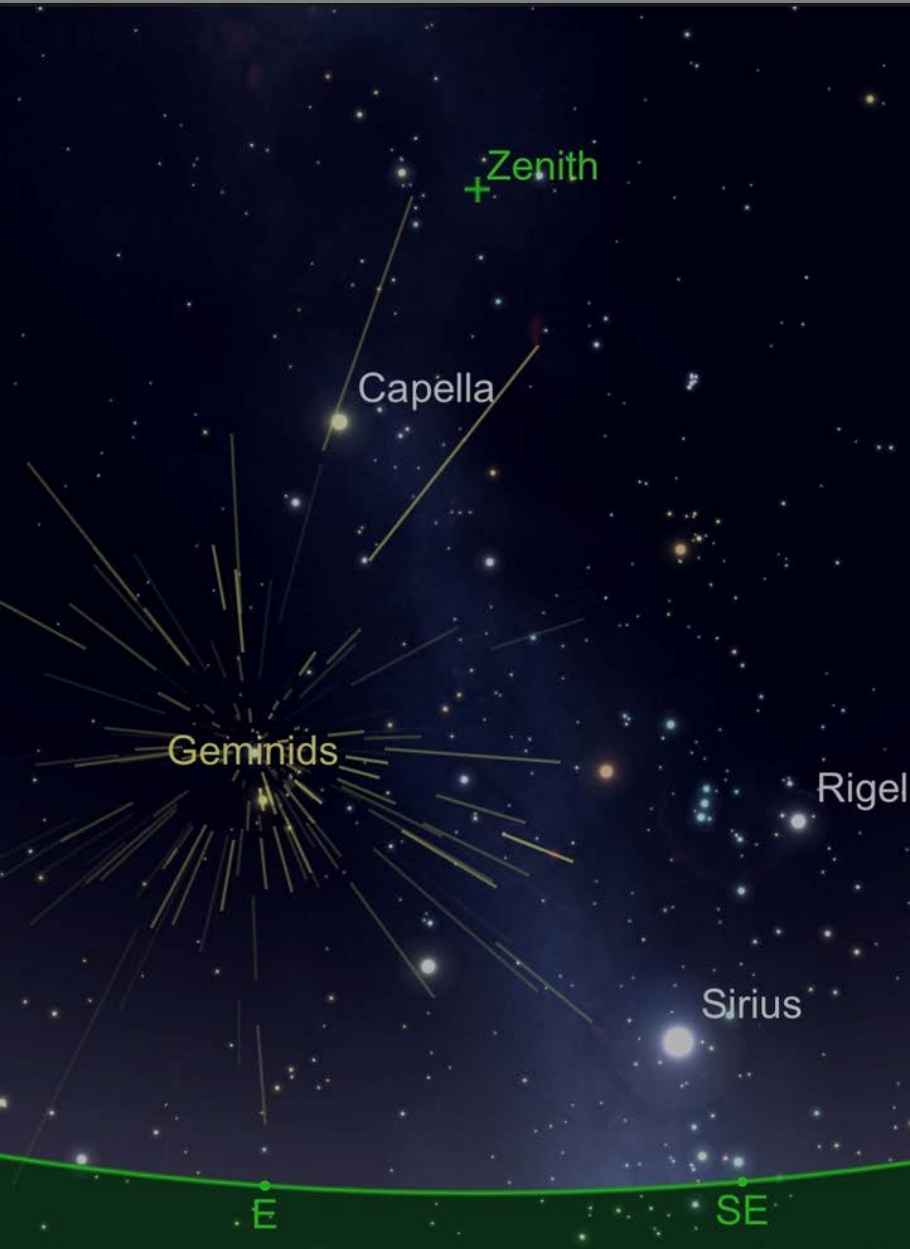
9. Posidonius

10. Ptolomaeus

11. Theophilus

12. Tycho

challenge



Geminid Meteor Shower

peak: night of Dec 14

up to 120 meteors/h at a dark site

long, slow tracks

source: 3200 Phaethon debris

waxing crescent Moon sets 7:15 p.m.

radiant above horizon early

Also: Ursid meteors Dec 22/23

The Planets in December

Mercury-visible after sunset low in the SW sky until mid Dec
-maximum eastern elongation (21°) on Dec 4 (mag. - 0.3)

Venus -prominent in the eastern morning sky (mag. -4.1)
-close to the waning crescent Moon on Dec 9

Mars -too close to the Sun to be visible

Jupiter -prominent in the eastern sky at the start of evening twilight (mag. -2.9)
-near the waxing gibbous Moon on Dec 21-22
-double shadow transits on Dec 23 and 30 (Observer's Handbook)

Saturn -visible in the SSW after sunset (mag. 0.9)
-close to the waxing crescent Moon on Dec 17

Uranus -visible all night (mag. 5.6) between Aries and Taurus

Neptune-visible after evening twilight (mag. 7.9) between Aquarius and Pisces

Binocular Observing and Photo Opportunity



Dec 14 @ 5:00 p.m.

Explore the Universe:

Winter Constellations

Auriga

Gemini

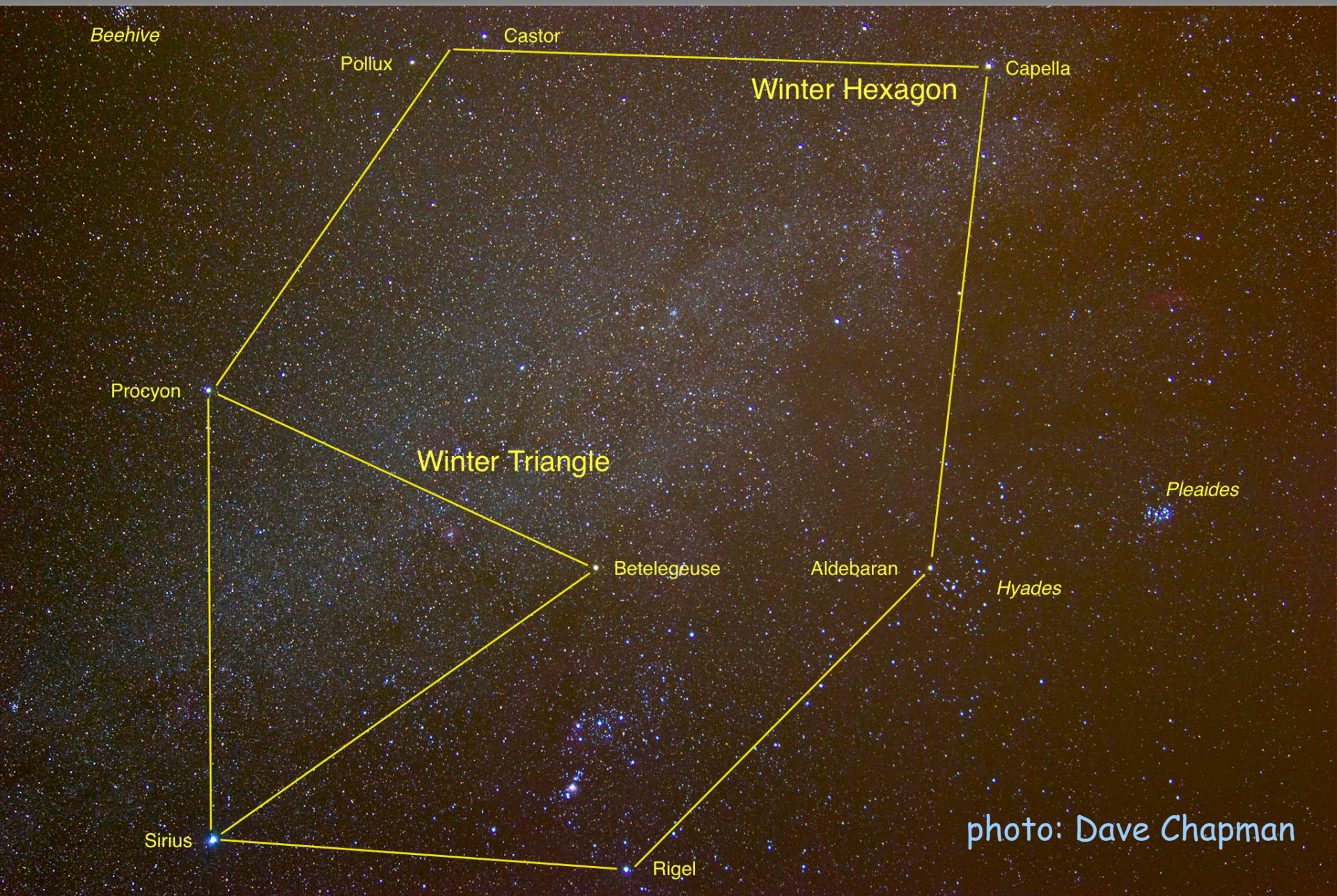
Taurus

Orion

Canis Major

Canis Minor





Beehive

Pollux

Castor

Winter Hexagon

Capella

Procyon

Winter Triangle

Betelegeuse

Aldebaran

Pleiades

Hyades

Sirius

Rigel

photo: Dave Chapman



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)

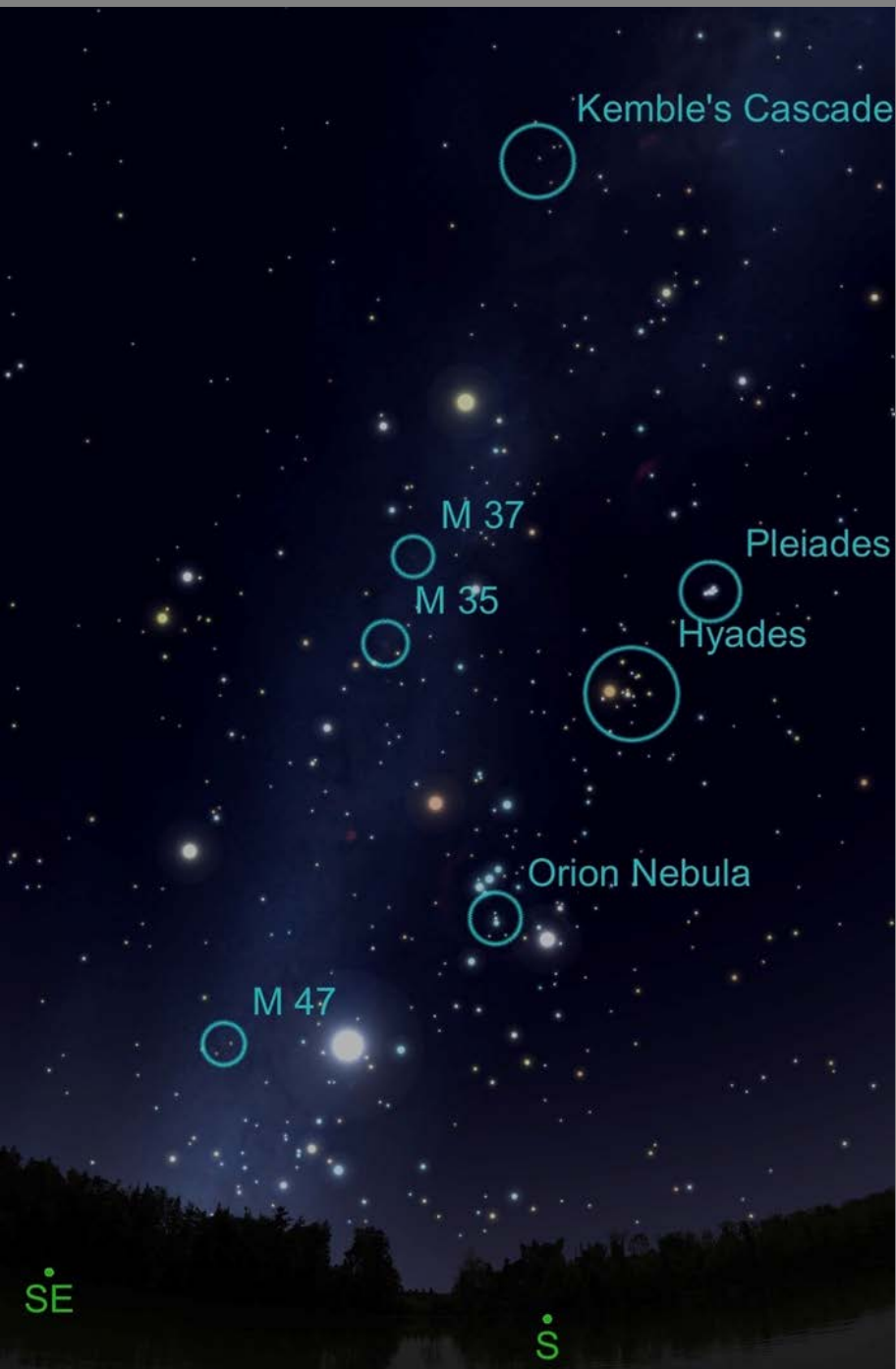
#45 Castor

Gomiesa

N = Navigation

all good for SynScan alignment

most good for Celestron alignment



Explore the Universe: Winter Deep-Sky Objects

Kemble's Cascade (asterism)





Explore the Universe: Winter Double Stars

Theta Tauri (3.4, 3.9, 348")

Two 3rd magnitude stars

Theta1 Tauri (yellow) @ 152 LY

Theta2 Tauri (blue) @ 157 LY



Questions?

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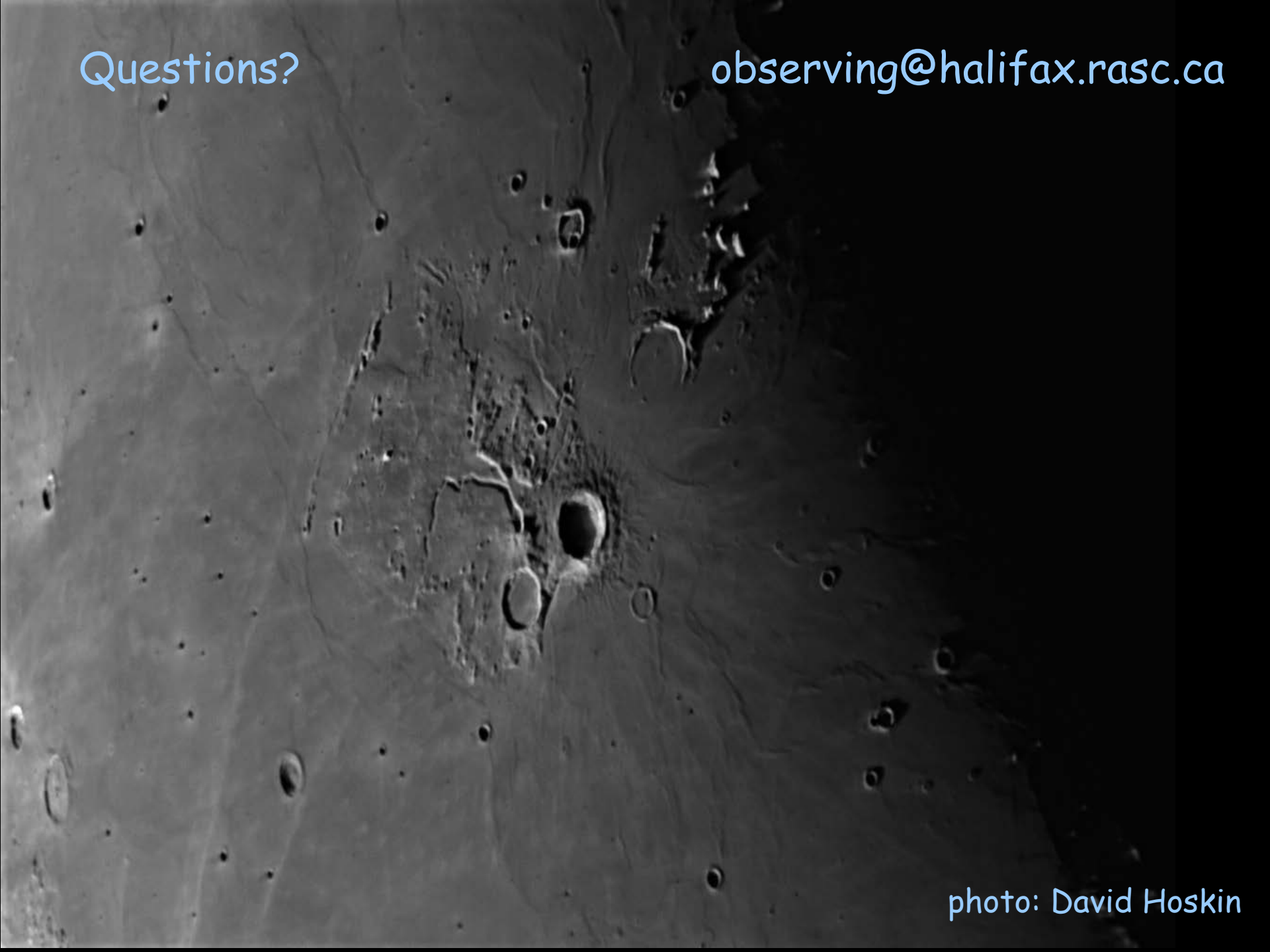


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