

What's Up?

June 1-30, 2025

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

photo: David Hoskin

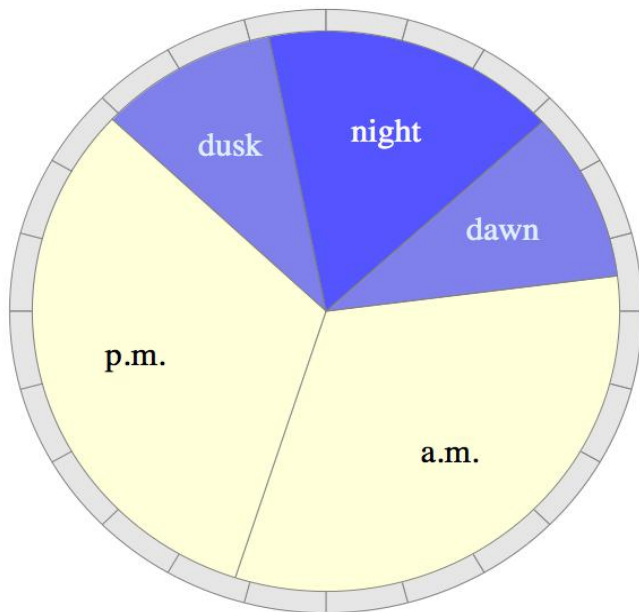
The Sun This Month

[Today's Solar Activity](#)

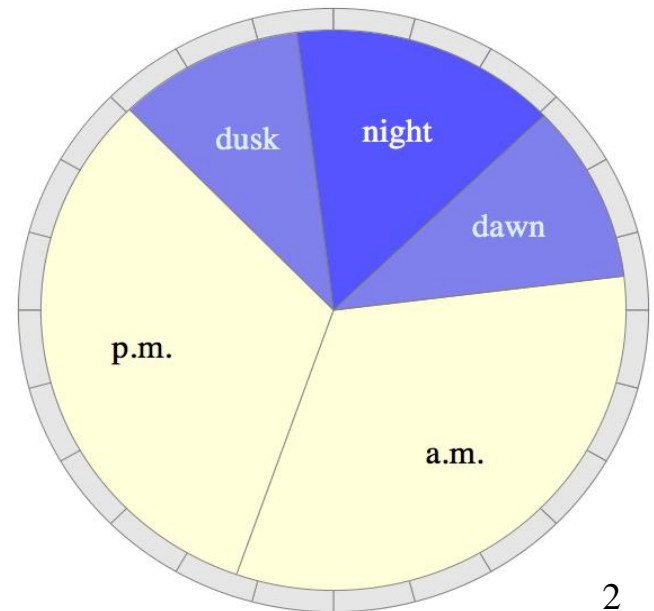
Date	Sunset	Dusk End	Darkness	Dawn Start	Sunrise	“Noon”	Sunlight	Max Altitude
June 1	8:52 p.m.	11:15 p.m.	3.9 h	3:10 a.m.	5:32 a.m.	1:12 p.m.	15.4 h	67.5°
June 30	9:03 p.m.	11:31 p.m.	3.6 h	3:04 a.m.	5:32 a.m.	1:18 p.m.	15.5 h	68.5°

Summer Solstice: June 20 at 11:42 a.m. (AST)

Halifax Jun 01



Halifax Jun 30



2

[YouTube: RASC Halifax](#)

Noctilucent Clouds

Sunlight below the horizon reflects off tiny ice crystals at 76-85 km



photo: David Hoskin

Visible in summer months during astronomical twilight (50-70° latitude)

The Moon This Month

Date	Phase	English	Mi'kmaq
June 1	Moon near Mars		
June 3	<i>First Quarter Moon</i>	Trees Fully Leafed	<u>Nipniku's</u>
June 7	Moon at apogee (405,600 km)		
June 9-10	Moon near M4 and Antares		
June 11	<i>Full Moon</i>		
June 18	<i>Last Quarter Moon</i>		
June 19	Moon near Saturn		
June 22	Moon near Venus		
June 23	Moon at perigee (363,200 km)		
June 25	<i>New Moon</i>	Birds Shedding Feathers	<u>Peskewiku's</u>
June 26	Moon near Mercury		
June 27	Moon near M44		
June 29	Moon-Mars conjunction		

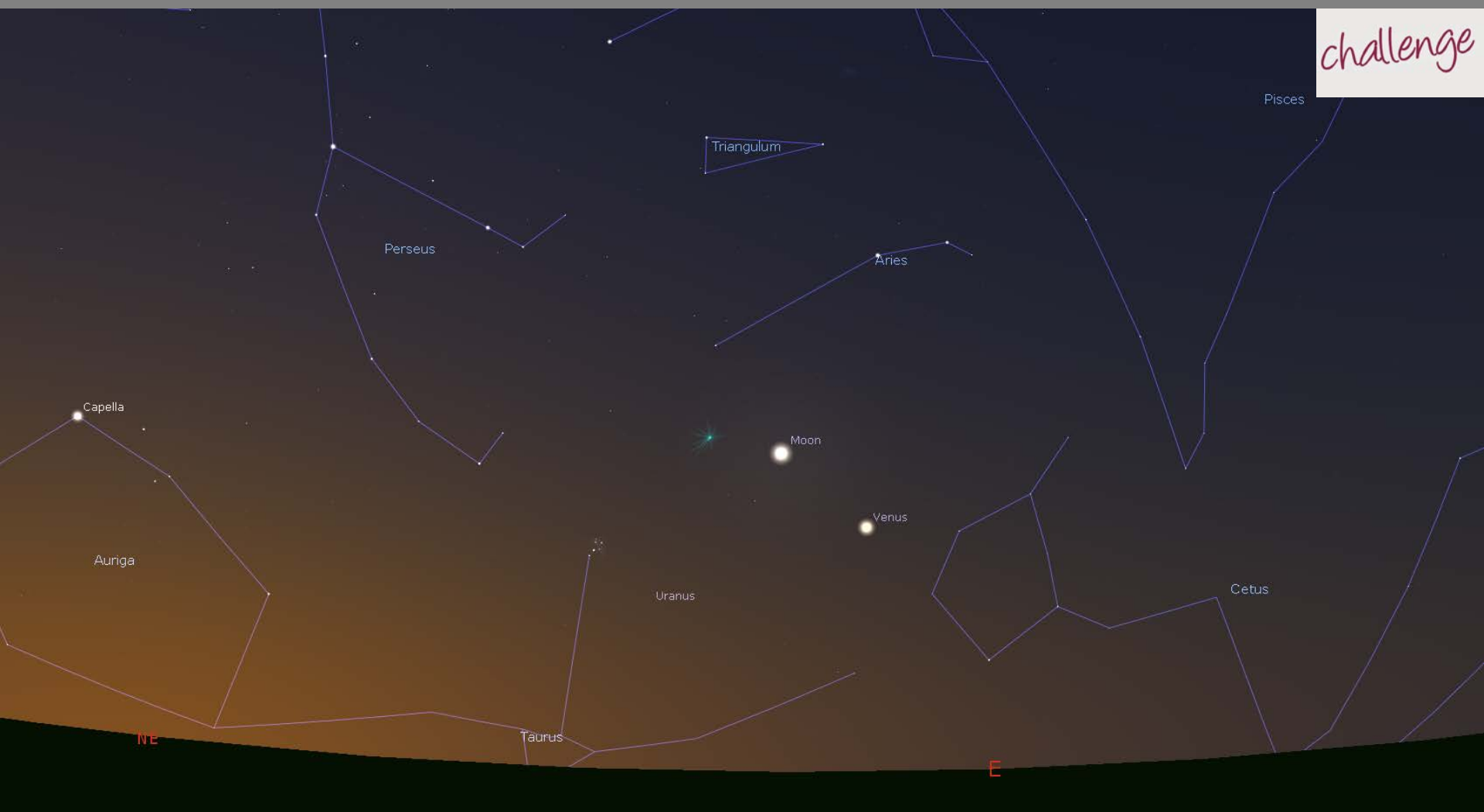


June 9 @ 11:30 p.m.
7x50 binoculars
F.O.V 7.1°



June 29 @ 10:30 p.m.
15x70 binoculars
F.O.V 4.4°

challenge



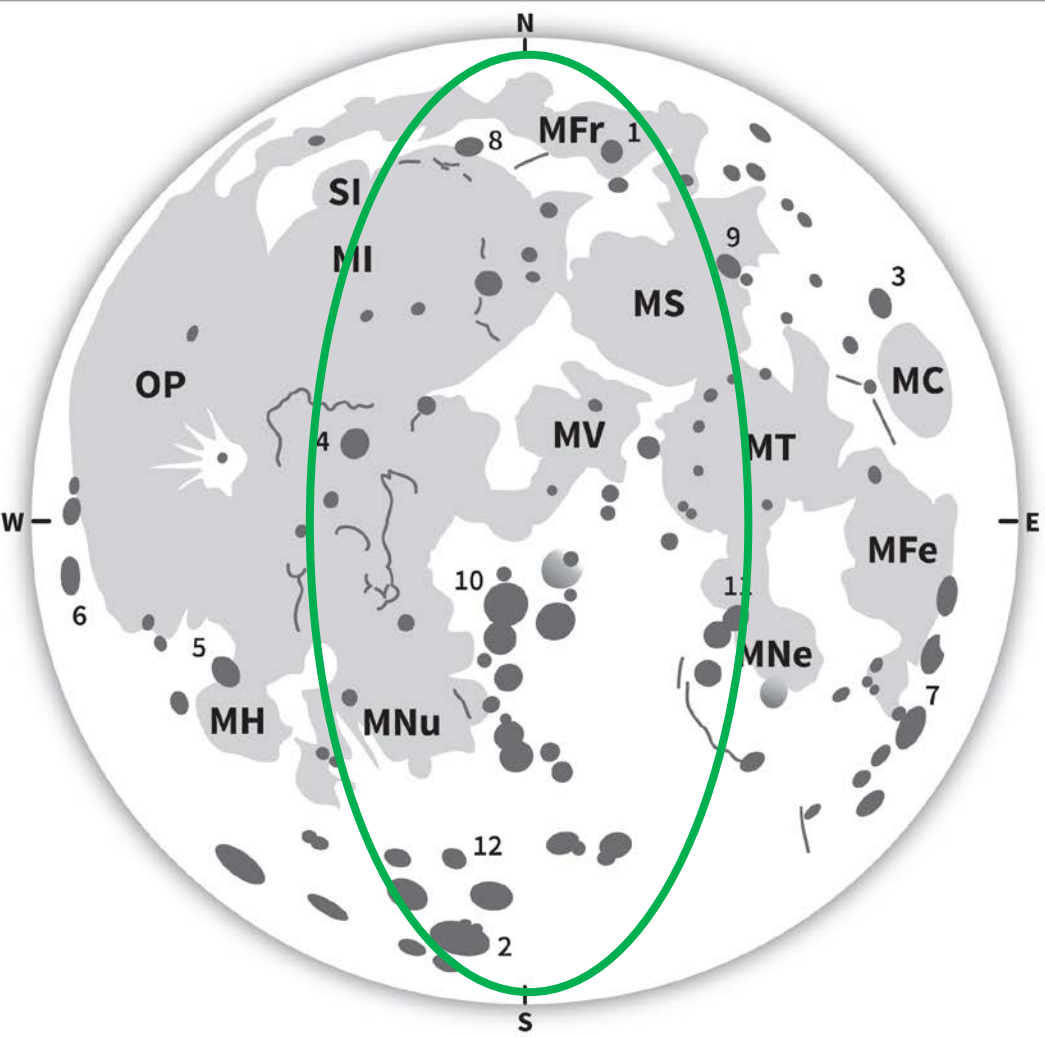
June 22 @ 4:30 a.m.

Thin Crescent Moon and Venus Photo Opportunity



June 26 @ 9:45 p.m.

Thin Crescent Moon and Mercury Photo Opportunity



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

Best between June 1-7

The Moon in

Explore the Universe

observe 3 of each in ⁸binos

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

Mare Orientale

challenge

Exploring the moon!

Mare Orientale

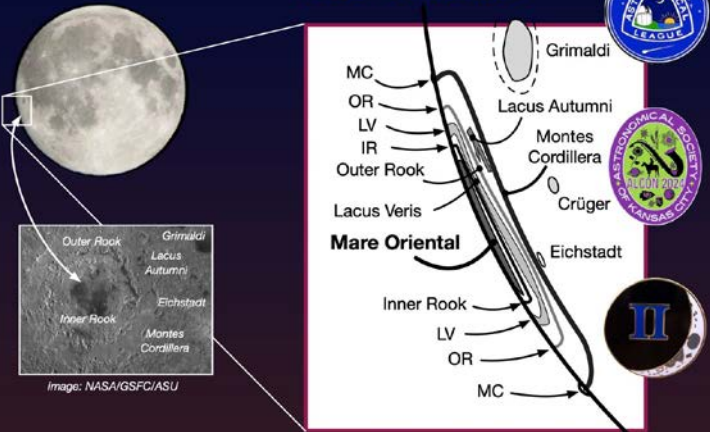
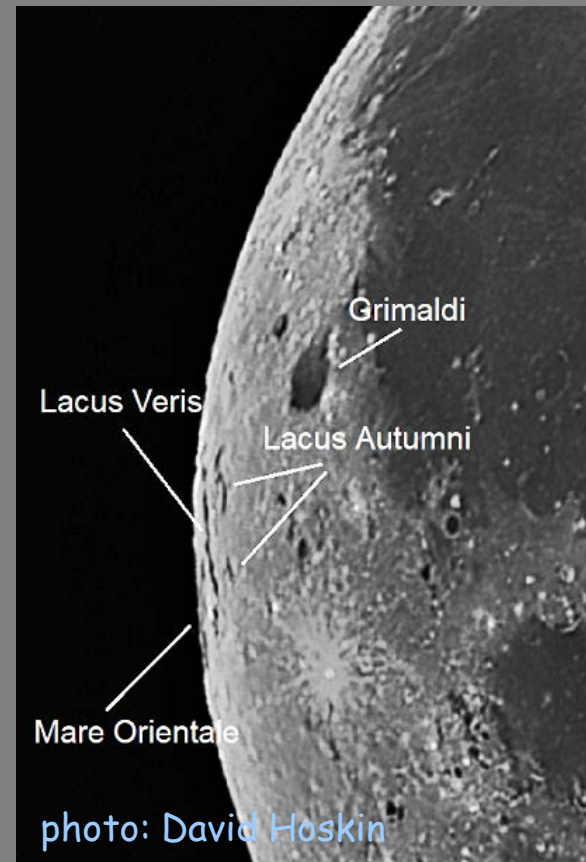


Image: NASA/GSFC/ASU

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.



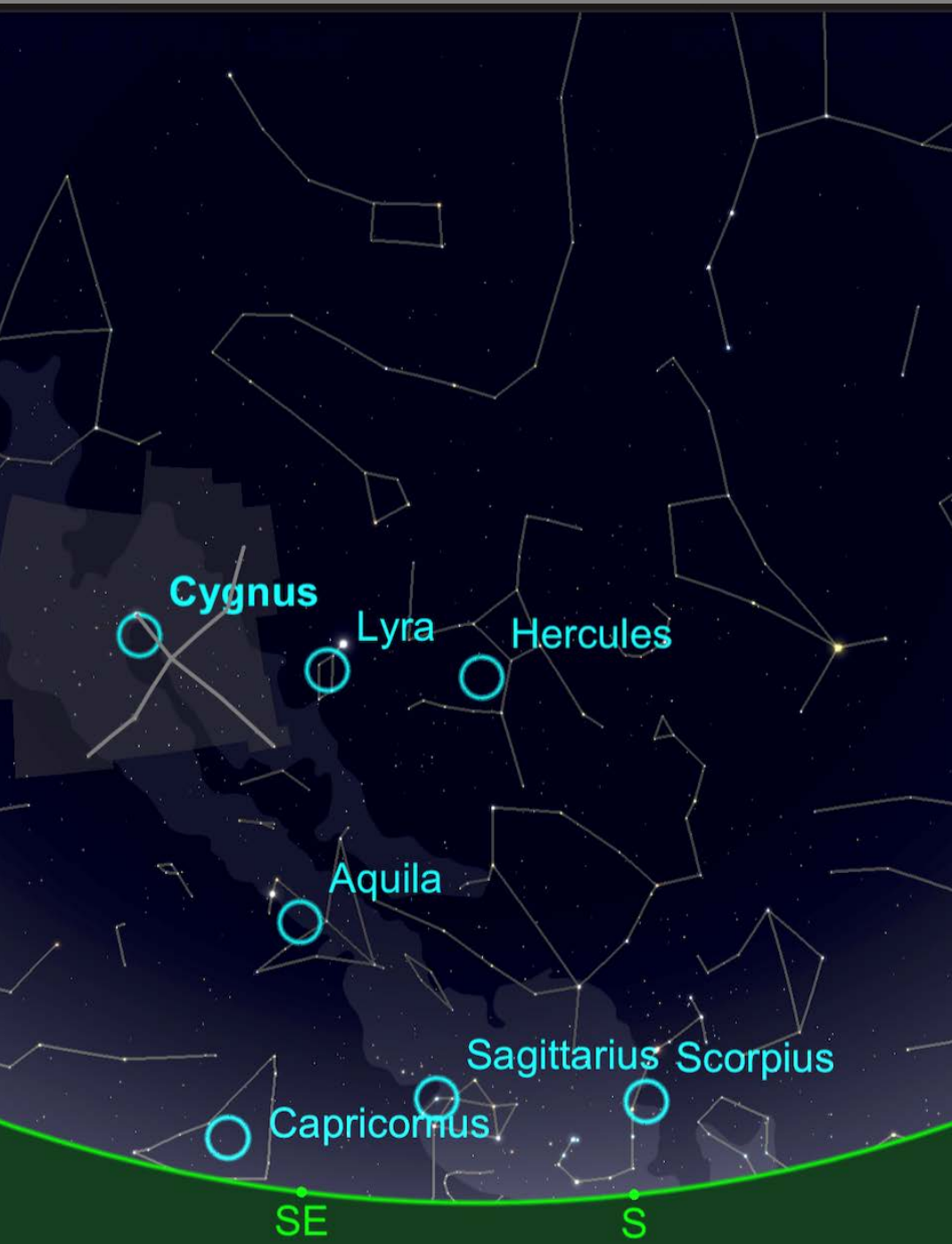
-look at 3:30 a.m. ADT on June 16 for favorable western libration exposing Mare Orientale



June 16 @ 11:00 p.m. Photo Opportunity - APS-C sensor and 150mm f/5 reflector



June 29 @ 3:30 a.m.
15x70 binoculars
F.O.V 4.4°



Explore the Universe: Summer Constellations

Twilight ends late:
~11:30 p.m.





Explore the Universe:

Summer Stars

Ranking:

#5 Vega (N)

#12 Altair (N)

#15 Antares (N)

#20 Deneb (N)

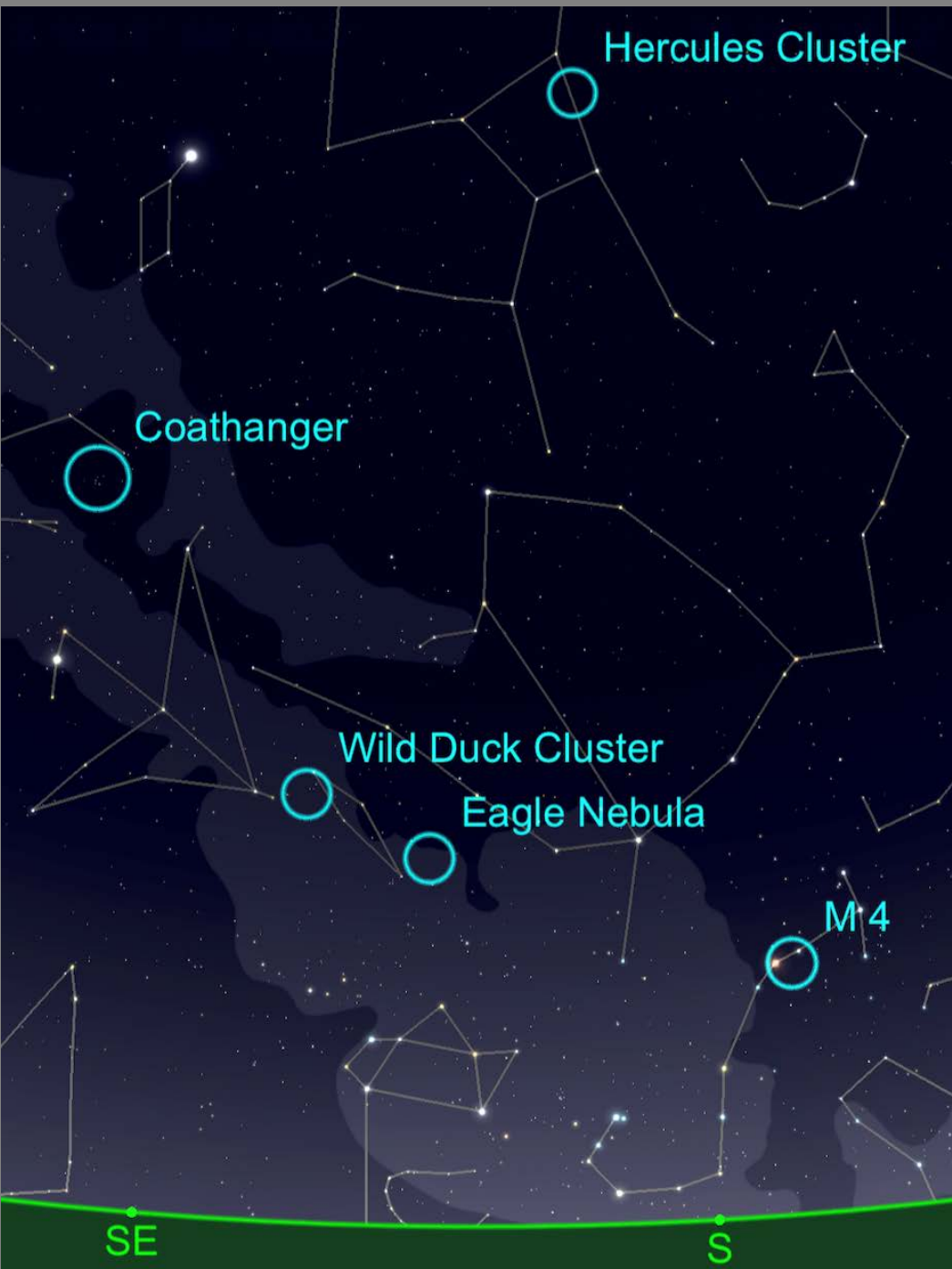
- Rasalgethi (A)

- Algedi

- Dabih

-Nunki (N)

- Albireo



Explore the Universe: Summer Deep-Sky

The Coathanger Asterism
(Brocchi's Cluster/Collinder 399)
1/3 the way from Altair to Vega

(view in binoculars in dark sky)



photo: David Hoskin



Explore the Universe: Summer Double Stars

Omicron 1 Cygni

Colorful triple (optical) star

o¹ Cyg (red giant) 881 LY distant

30 Cyg (white) 615 LY distant

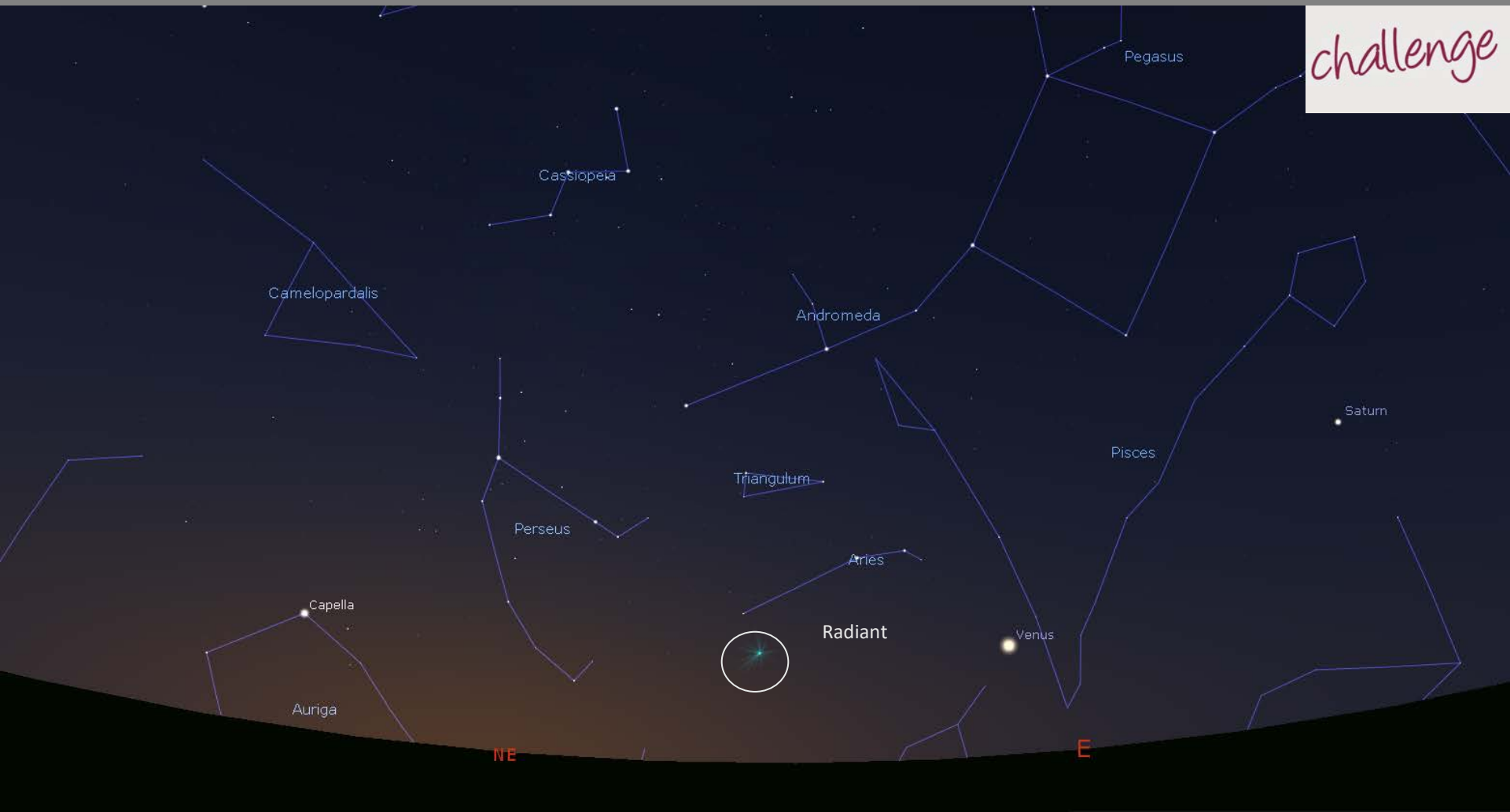
HD 192579 (blue) 1359 LY distant



photo: David Hoskin

The Arietids Meteor Shower (May 29- June 17)

- radiant is in Aries; predicted peak is during the daylight hours of June 7
- expect 60-200 meteors per hour
- best time to view is an hour before dawn



[How to hear meteors on your FM radio](#)

Explore the Universe: Artificial Satellites

- the Explore the Universe observing program requires observation of at least 3 Earth-orbiting artificial satellites
- the International Space Station is an easy target for the unaided eye, appearing as a brilliant point of light moving quickly across the night sky
- dates and times for sighting opportunities can be obtained from [Spot The Station | NASA](#)



photos: David Hoskin

Questions?

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