

What's Up?

September 1-30, 2023

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

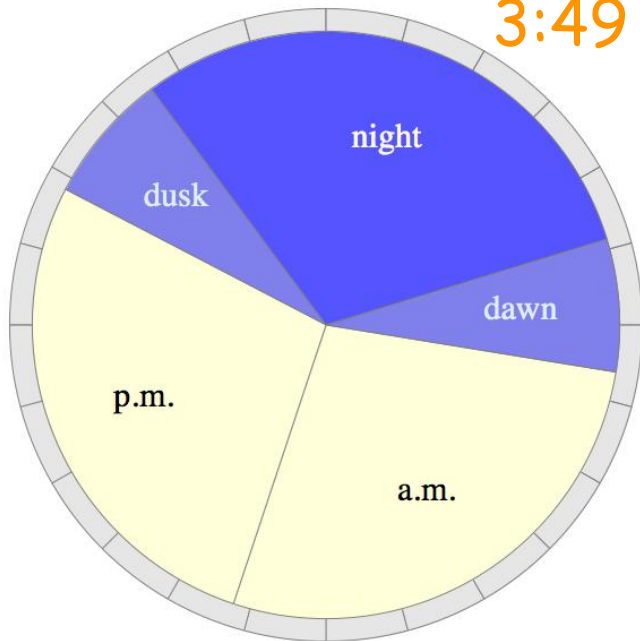
photo: David Hoskin

The Sun This Month

Today's Solar Activity

Date	Sunset	Dusk End	Darkness	Dawn Start	Sunrise	“Noon”	Sunlight	Max Altitude
Sept 1	7:51 p.m.	9:35 p.m.	7.3 h	4:51 a.m.	6:36 a.m.	1:14 p.m.	13.2 h	53.6°
Sept 30	6:57 p.m.	8:34 p.m.	9.0 h	5:33 a.m.	7:10 a.m.	1:04 p.m.	11.7 h	42.5°

Halifax Sept 1



Autumnal Equinox
3:49 a.m. ADT Sept 23

Halifax Sept 30

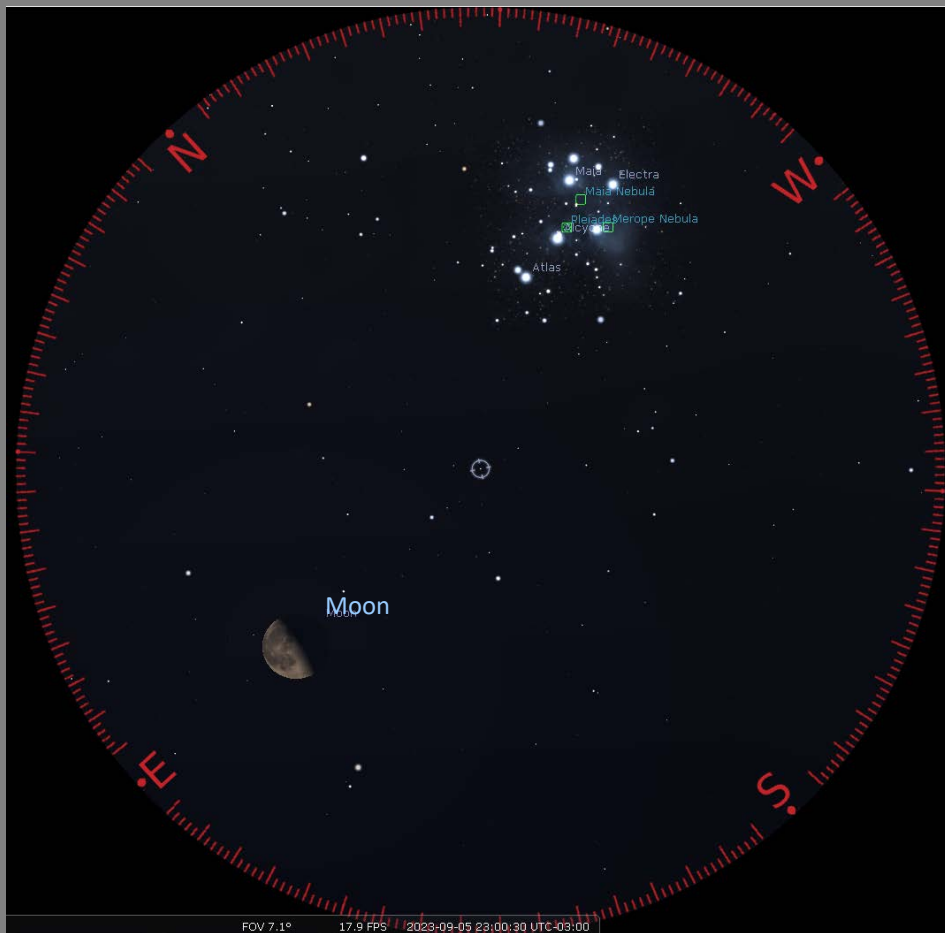


YouTube: RASC Halifax

The Moon This Month

Date	Phase	English	Mi'kmaq
Sept 4	Moon near Jupiter		
Sept 5	Moon near the Pleiades		
Sept 6	<i>Last Quarter</i>	Mate Calling	Wikumkewiku's
Sept 11	Moon near the Beehive Cluster		
Sept 15	<i>New Moon</i>		
Sept 21	Moon near Antares		
Sept 22	<i>First Quarter</i>		
Sept 29	<i>Full Moon</i>	Animal Fattening	Wikewiku's

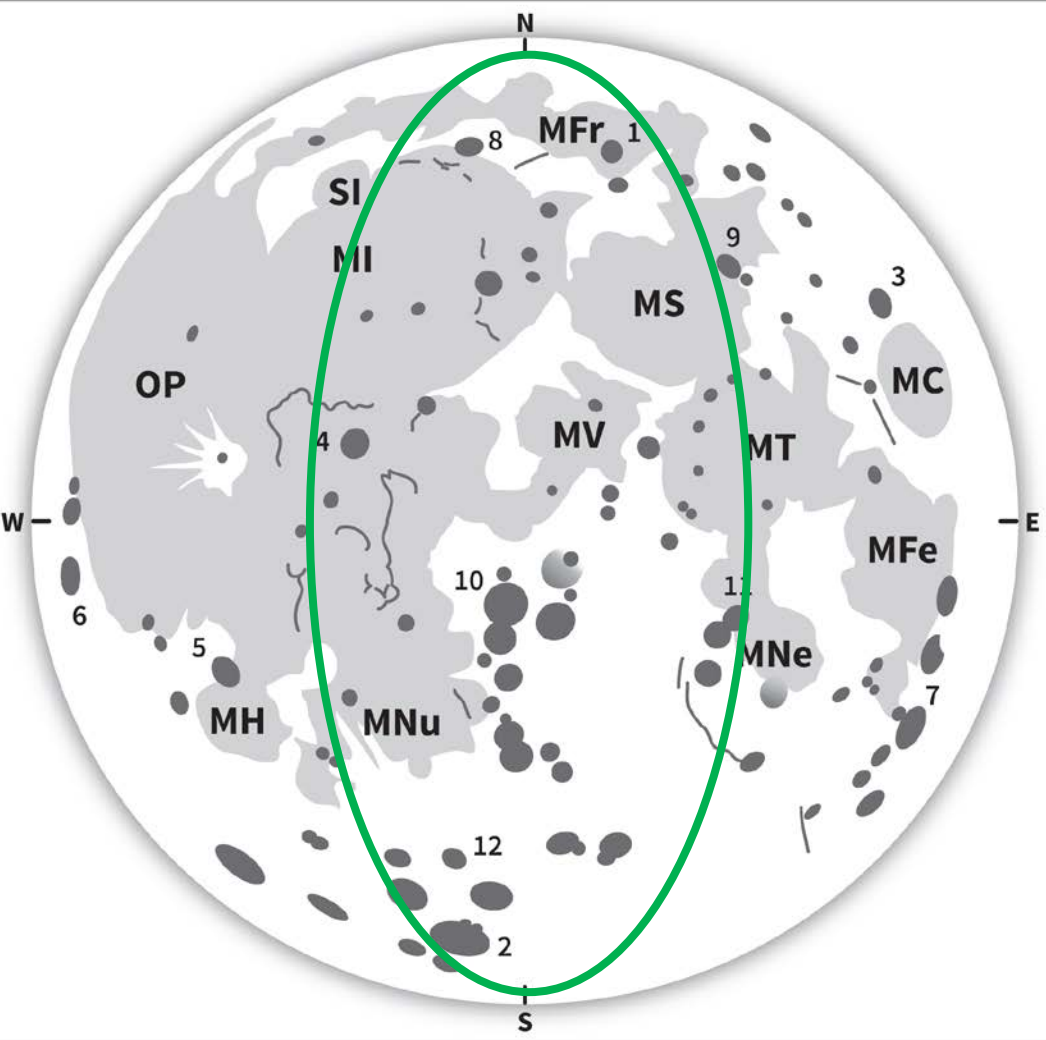
View with 7x50 binoculars (FOV 7.1°)



5 September at 11:00 p.m.



11 September at 4:30 a.m.



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

September 8-12

The Moon in

Explore the Universe

observe 3 of each in binoculars⁵

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 | |

challenge

The Planets in September

Mercury-reappears in the eastern predawn sky (mag. 1.3) by mid-month
-greatest western elongation (18°) on September 22

Venus -prominent in the eastern morning sky (mag. -4.8)

Mars -visible very low in the western sky at twilight until mid-month (mag. 1.7)
-occulted by crescent Moon on September 16 at 4:40 p.m.

challenge

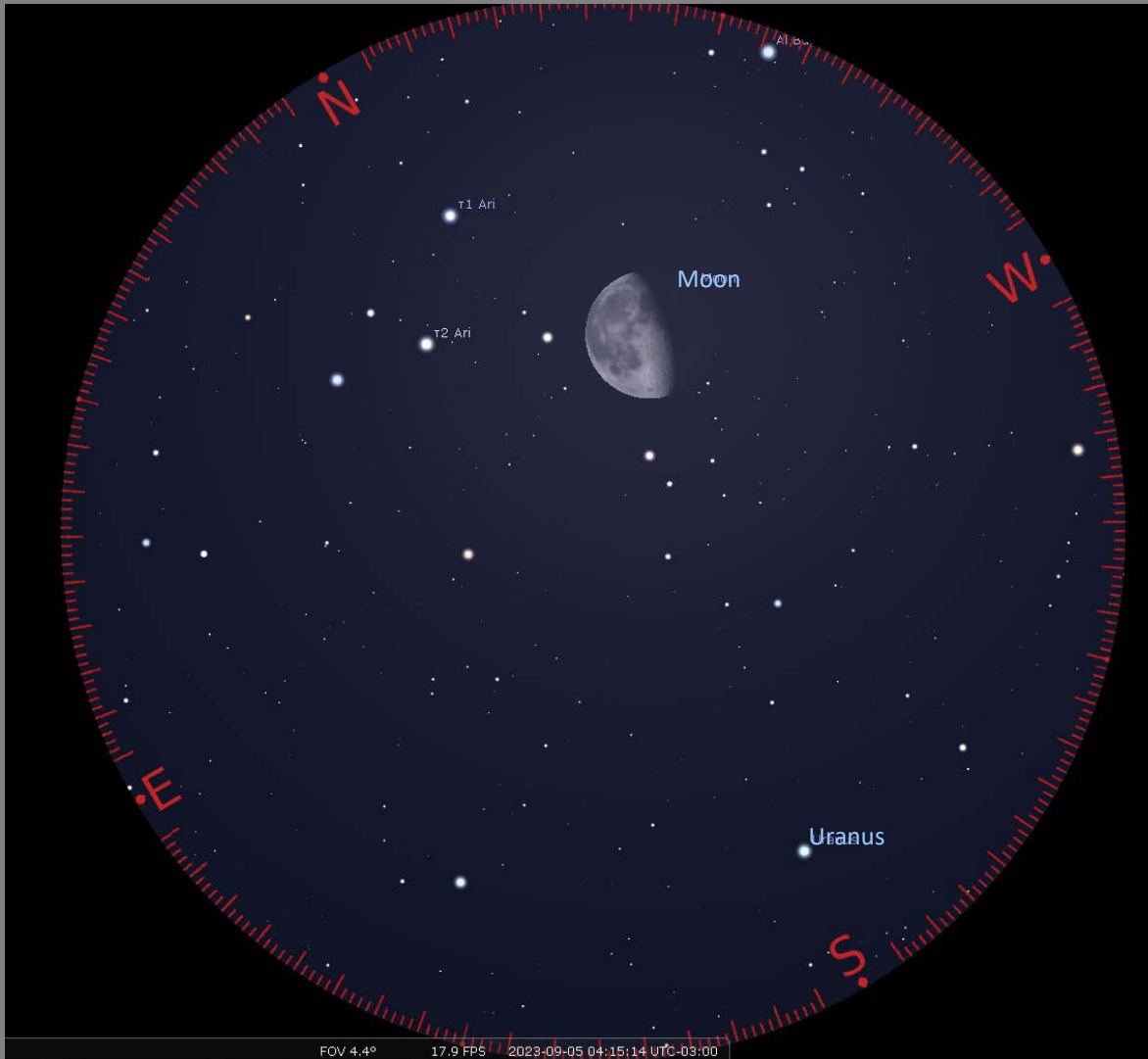
Jupiter -rises before midnight (mag. -2.6)
-near waning gibbous Moon on September 4

Saturn -rises before in Aquarius before sunset (mag. 0.4)
-close to waxing gibbous Moon on September 28
-well placed for evening observation

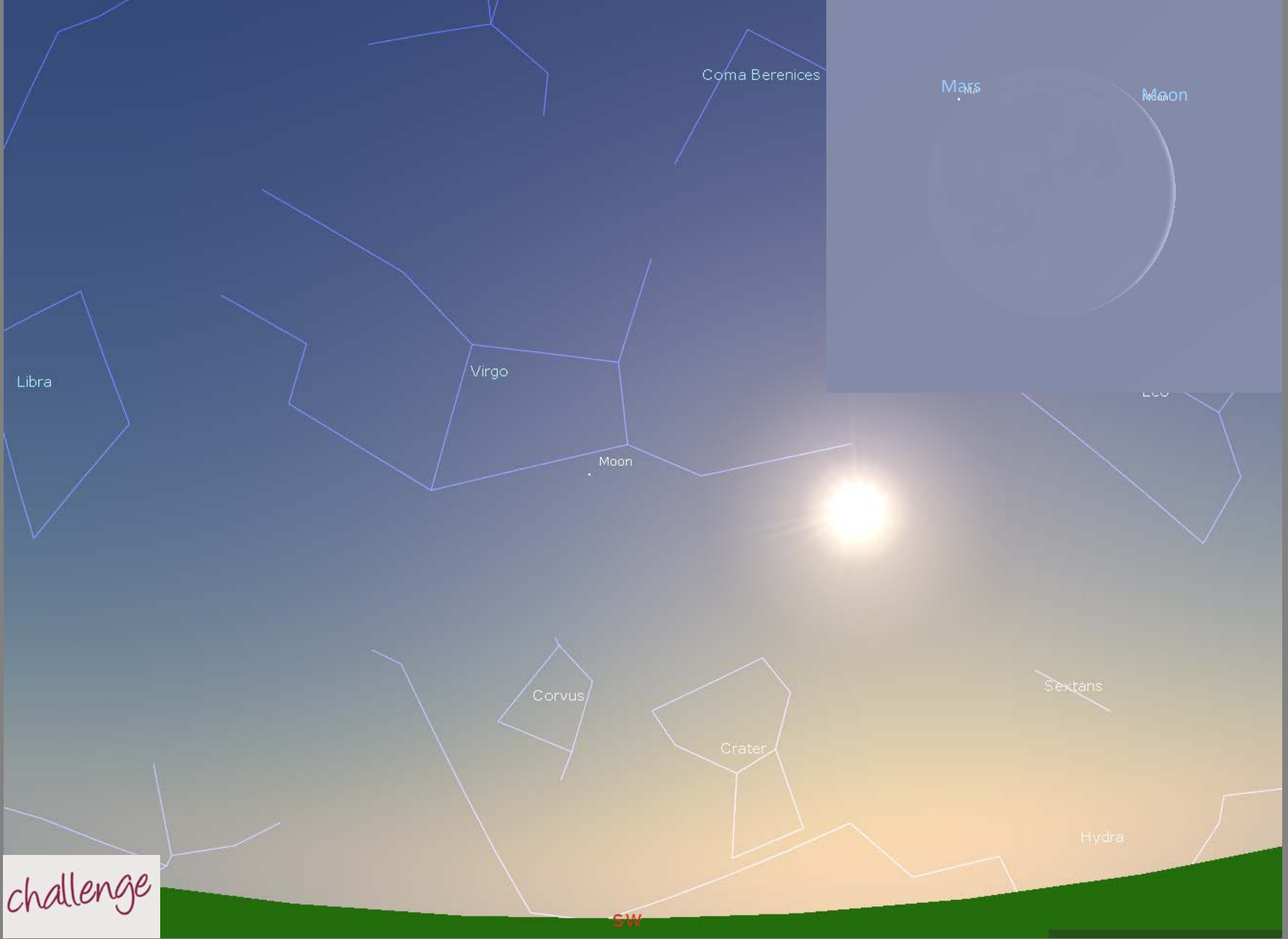
Uranus -rises in late evening hours (mag. 5.8)
-located at boundary between Aries and Taurus
-close to waning gibbous Moon on September 5

Neptune-rises in Pisces during early evening hours (mag. 7.8)
-achieves opposition on September 19

View with 15x70 binoculars (FOV 4.4°)



5 September at 4:00 a.m.



challenge

16 September at 4:40 p.m. (view with telescope)

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 moonless sky and dark observing site
- dust concentrated in the plane of the ecliptic and towards the Sun reflects sunlight

challenge



14 Sept 2023 @ 5:30 a.m.



8 September 2021 @ 5:08 a.m., Chebucto Head



Explore the

Universe:

Autumn

Constellations

Pegasus

Andromeda

Cassiopeia

Perseus

Aries





Explore the Universe:

Autumn Stars

Ranking:

#35 Mirfak (N)

Hamal (N)

Alpheratz (N)

Algol

Schedar (N)

Markab

Sheratan

N = Navigation

all good for Syn Scan alignment

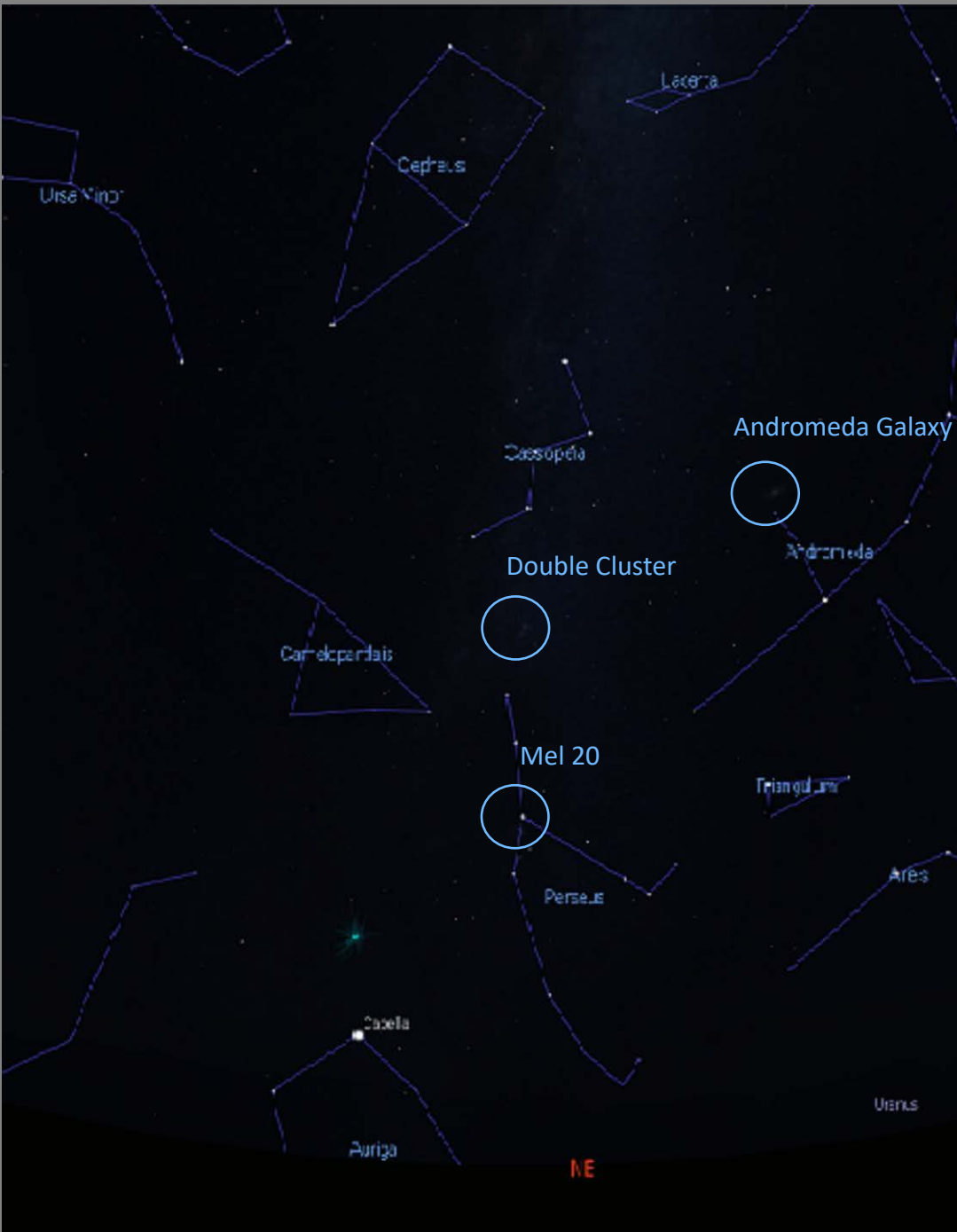
Explore the Universe: Autumn Deep-Sky Objects

The Double Cluster

Open star clusters NGC 869

and NGC 884 in Perseus

Visible to the unaided eye



challenge



photo: David Hoskin



Explore the Universe: Autumn Double Star

16 Cygni A and B (6.0, 6.2, 40")

Located near Iota and Theta Cygni

Yellow dwarf stars 69 LY from Earth

An exoplanet orbits 16 Cygni B

challenge



photo: en.wikipedia.org

Questions?

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photo: David Hoskin