



GO STARGAZING

A Beginner's Guide to the Night Sky

Dr Emma Alexander

Discovering Spain and Morocco
15th - 27th Feb 2025



- Introduction to Go Stargazing & your cruise astronomer
- Brief intro to stargazing
- Stargazing highlights of this cruise
- On-board events





Intro to your Astronomer & Go Stargazing



Dr Emma Alexander (she/her)

- Research Fellow in Astrophysics at the University of Leeds, working in Radio Astronomy
- PhD from Jodrell Bank
- Started out as amateur astronomer before going into physics (15+ years of stargazing!)
- Has spent lots of time talking about astronomy, including on the radio and TV
- Huge animal lover; has a home full of rescues (two guinea pigs, two cats, and a dog)



Emma and glamorous assistant **Saboor** — can also ask him about physics!





About Go Stargazing

- Enthusiastic and friendly astronomers
- Stargazing events across the UK
- Dark sky sites & observatories
- Astronomy groups
- Hints and tips
- Beginner's telescopes
- Stargazing-friendly accommodation
- Free mobile app





Introduction to Stargazing

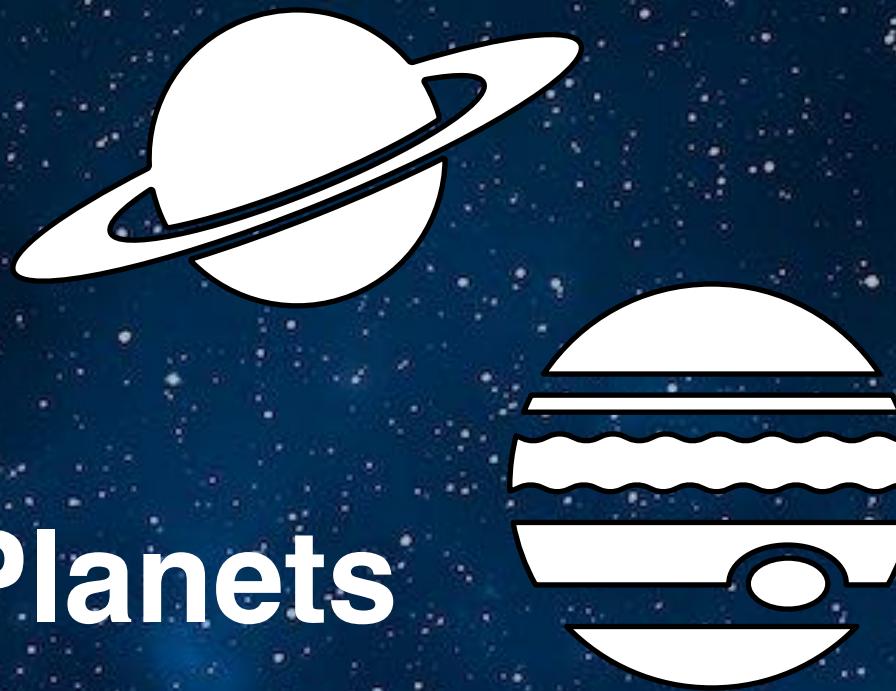


Just look up!

Our Solar System:



The Moon



Planets



Comets



Meteor
showers



Our Galaxy:
Stars, clusters, and
nebulae



Other Galaxies



Nebula vs galaxy





Constellation vs cluster





Stargazing on board



Bookable
stargazing sessions



Say hello any time!

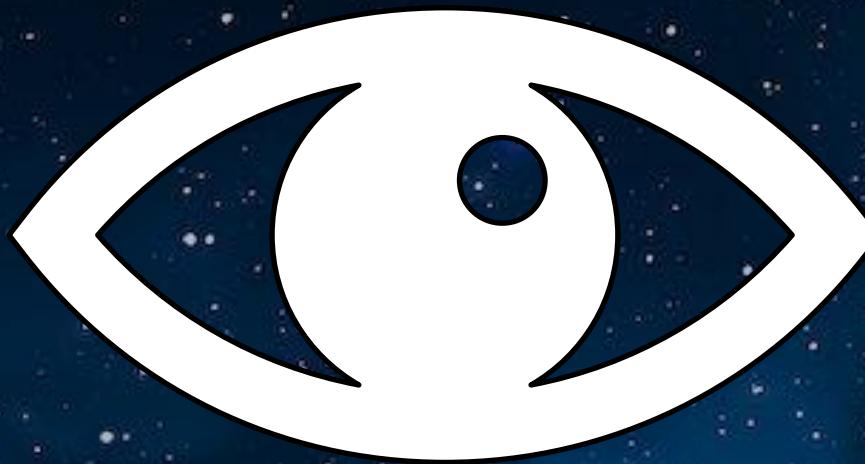


DIY: tips and
tricks



Equipment

All you need:



Your eyes

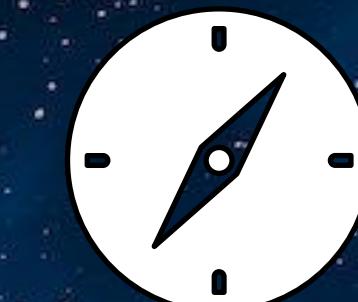


Warm clothing

Useful:



Binoculars



Compass



Camera



Smartphone

Not needed:



Telescope



Light pollution

The further away from city lights, the better the stargazing. Where better than at sea?



Bortle Scale. ESO/P. Horálek, M. Wallner



<https://gostargazing.co.uk/light-pollution-map/>



Stargazing highlights



GO STARGAZING

STARGAZING HIGHLIGHTS - FEBRUARY 2025

- 05** Half-Moon near Uranus
Use binoculars to locate this distant planet using the Moon as your guide
- 06** Moon near the Pleiades star cluster
Best viewed using binoculars, the Moon looks great near this open cluster
- 07** Moon near Jupiter
Tonight the Moon appears close to Jupiter
- 09** Moon near Mars
The red planet can be found right next to the near-full Moon
- 12** Moon near Regulus and the Sickle of Leo
Use the Moon to find the Sickle (or backwards question mark) of Leo
- 16** Venus shines at its brightest
The "evening star" peaks in brightness looking spectacular at dusk
- 25** Saturn and Mercury meet soon after Sunset
Clear views low to the West horizon will be needed to see this conjunction

Stargazing highlights

Follow Go Stargazing on social media for more monthly stargazing highlights!

For our cruise, the highlights will be planetary, with all of the naked eye planets visible:

- Mercury
- Venus
- Mars
- Jupiter
- Saturn

Plus the waning Moon

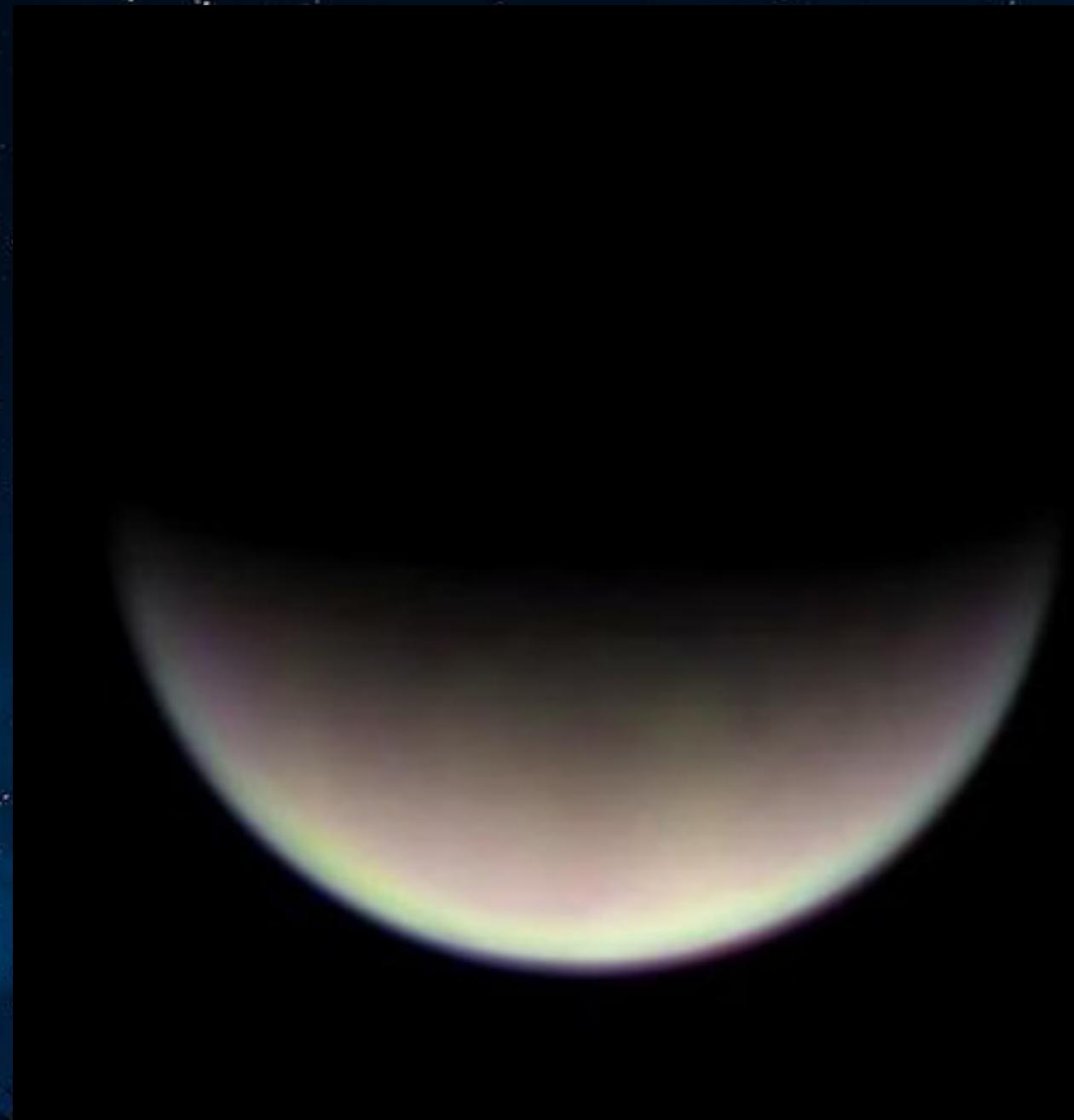


Phases of the Moon

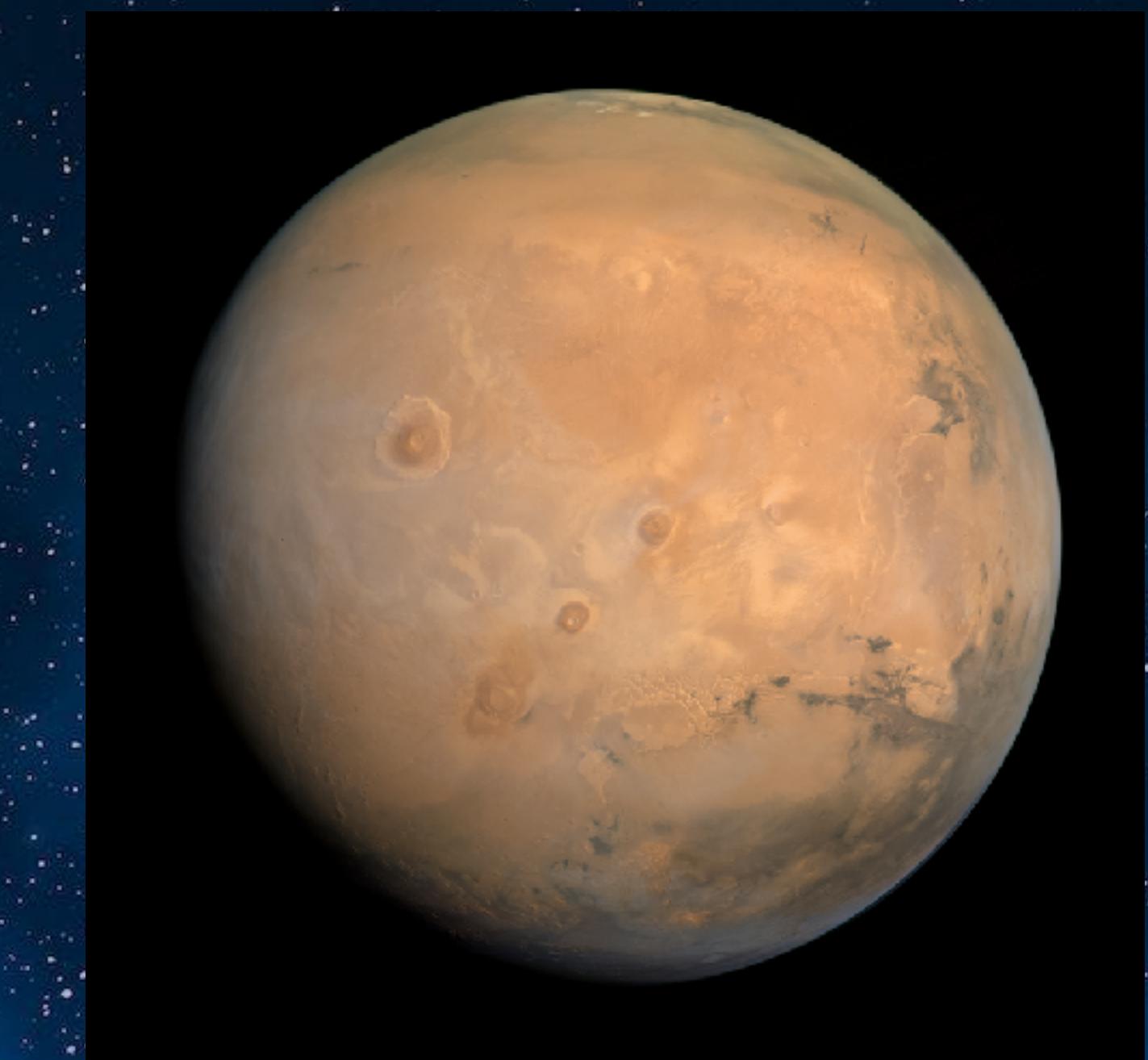
The Moon can have a large impact on stargazing, but is well-placed for this cruise.

It will rise later and be less bright each night.

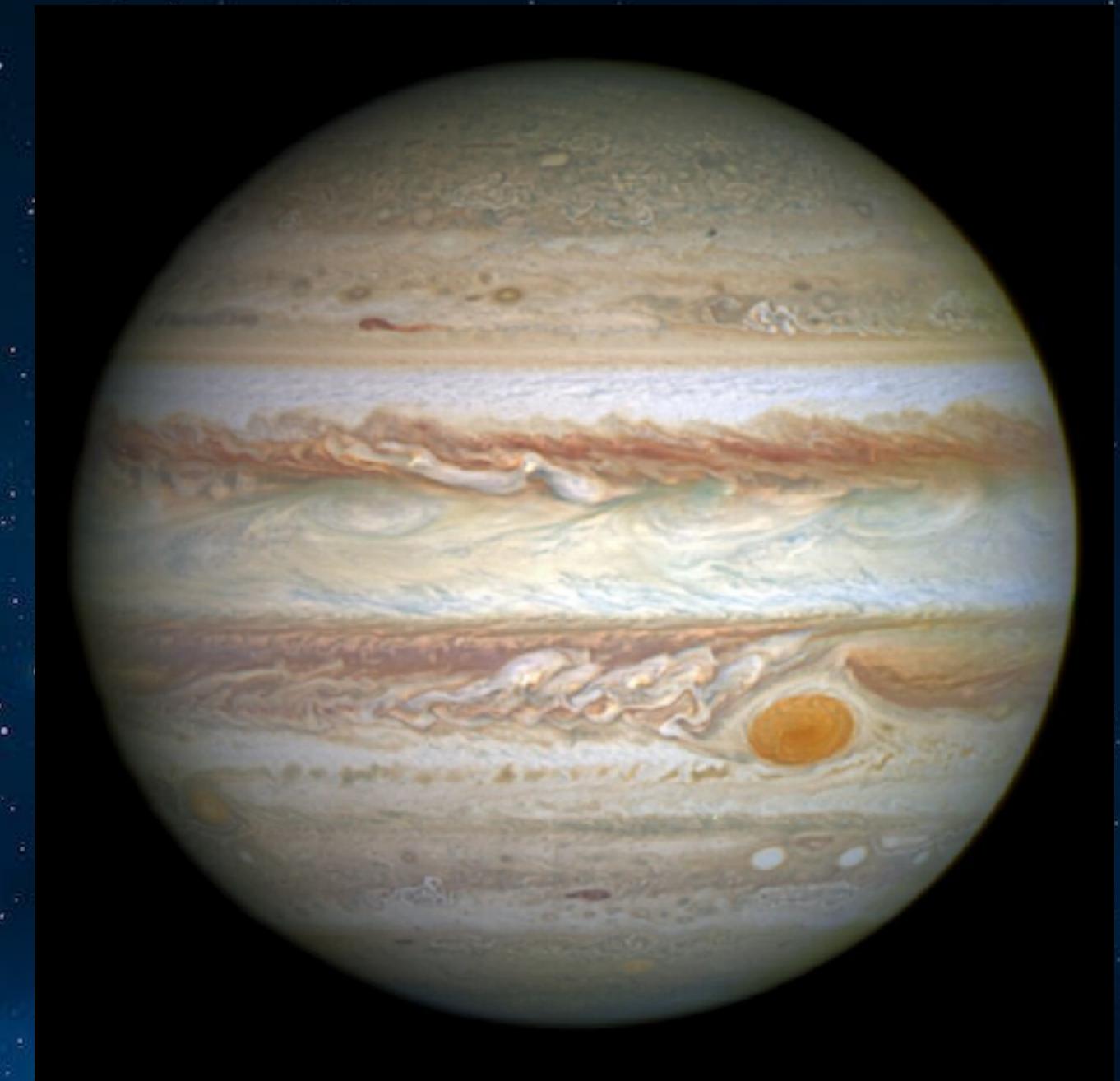


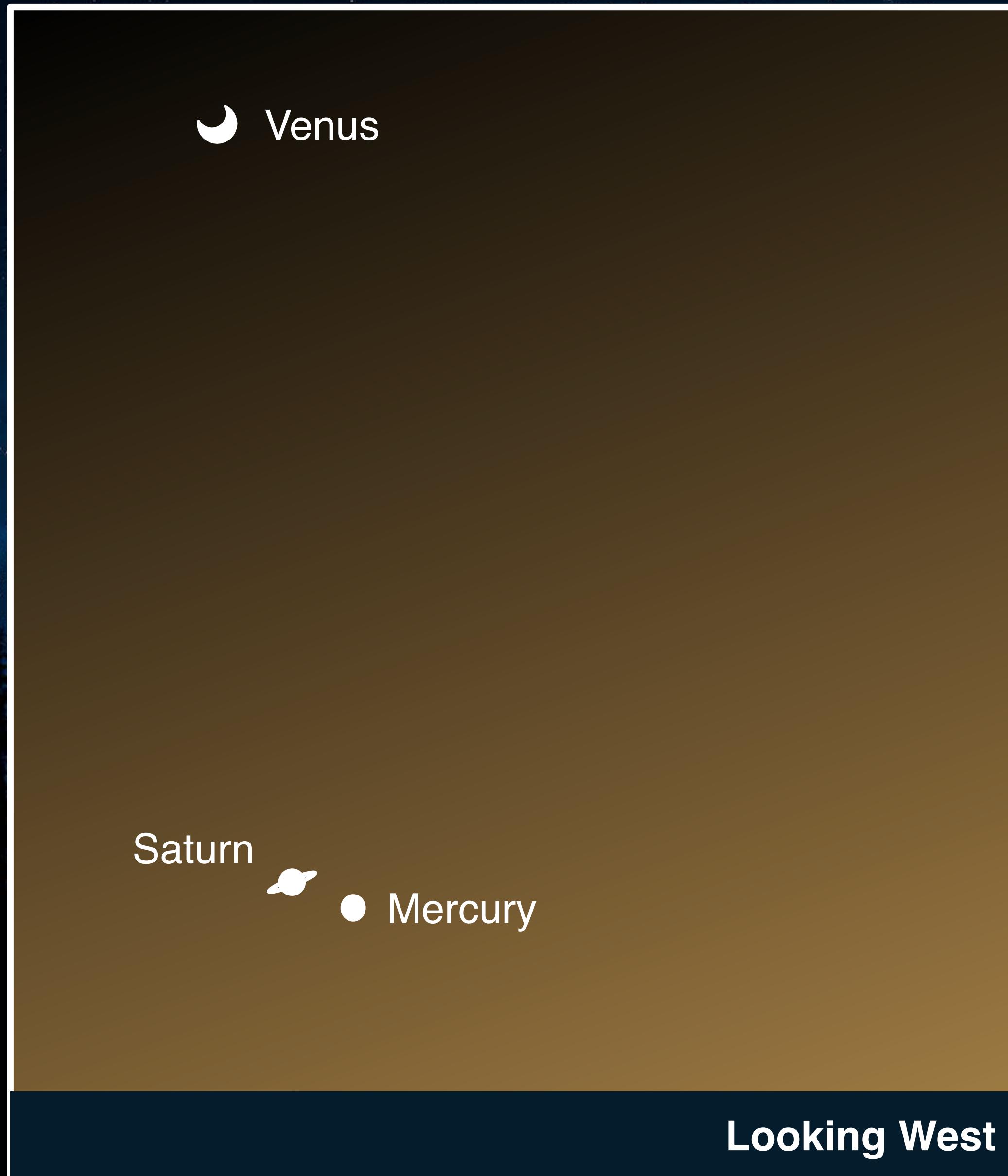


Venus
Look West
after sunset



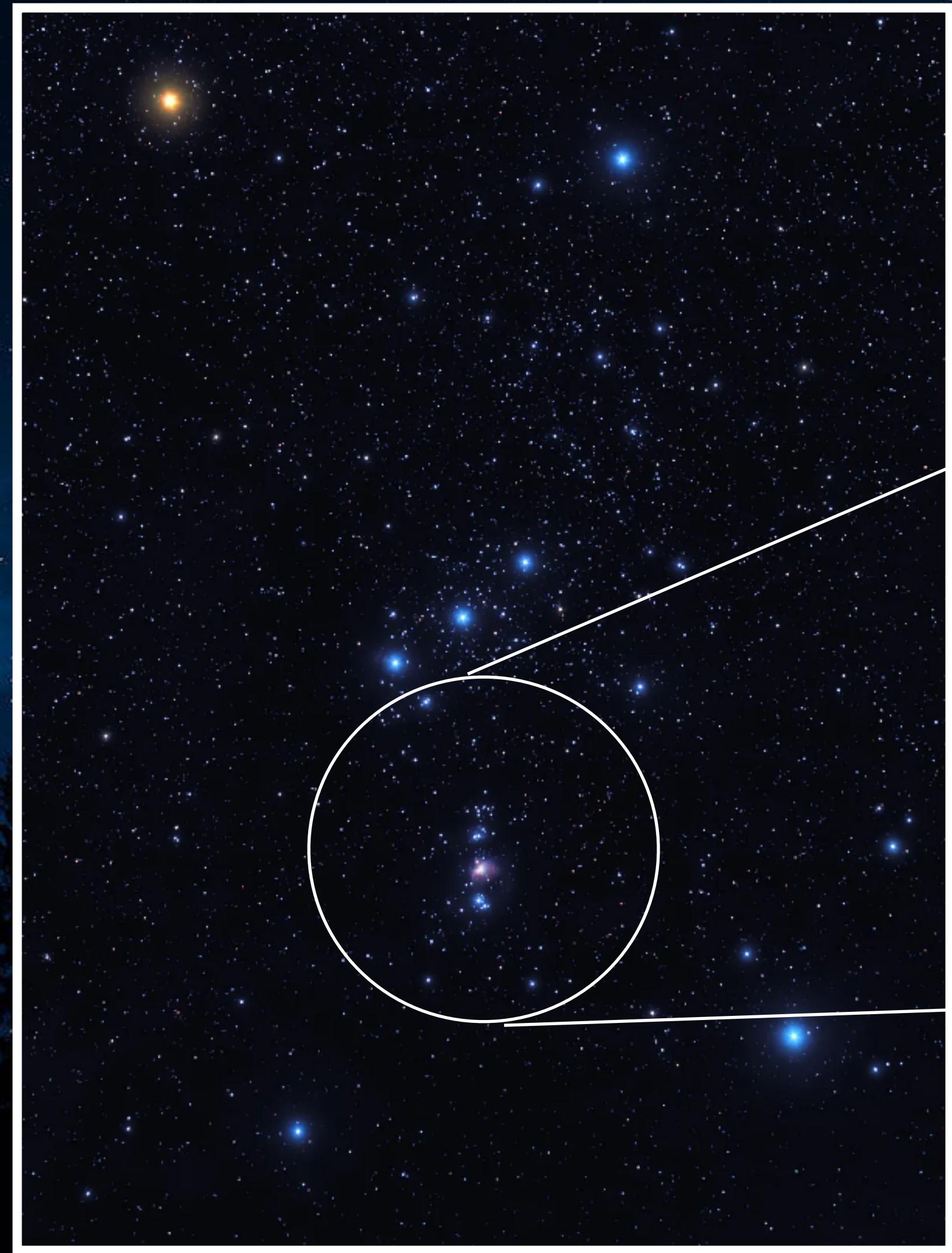
Mars and Jupiter
Look South
throughout the night



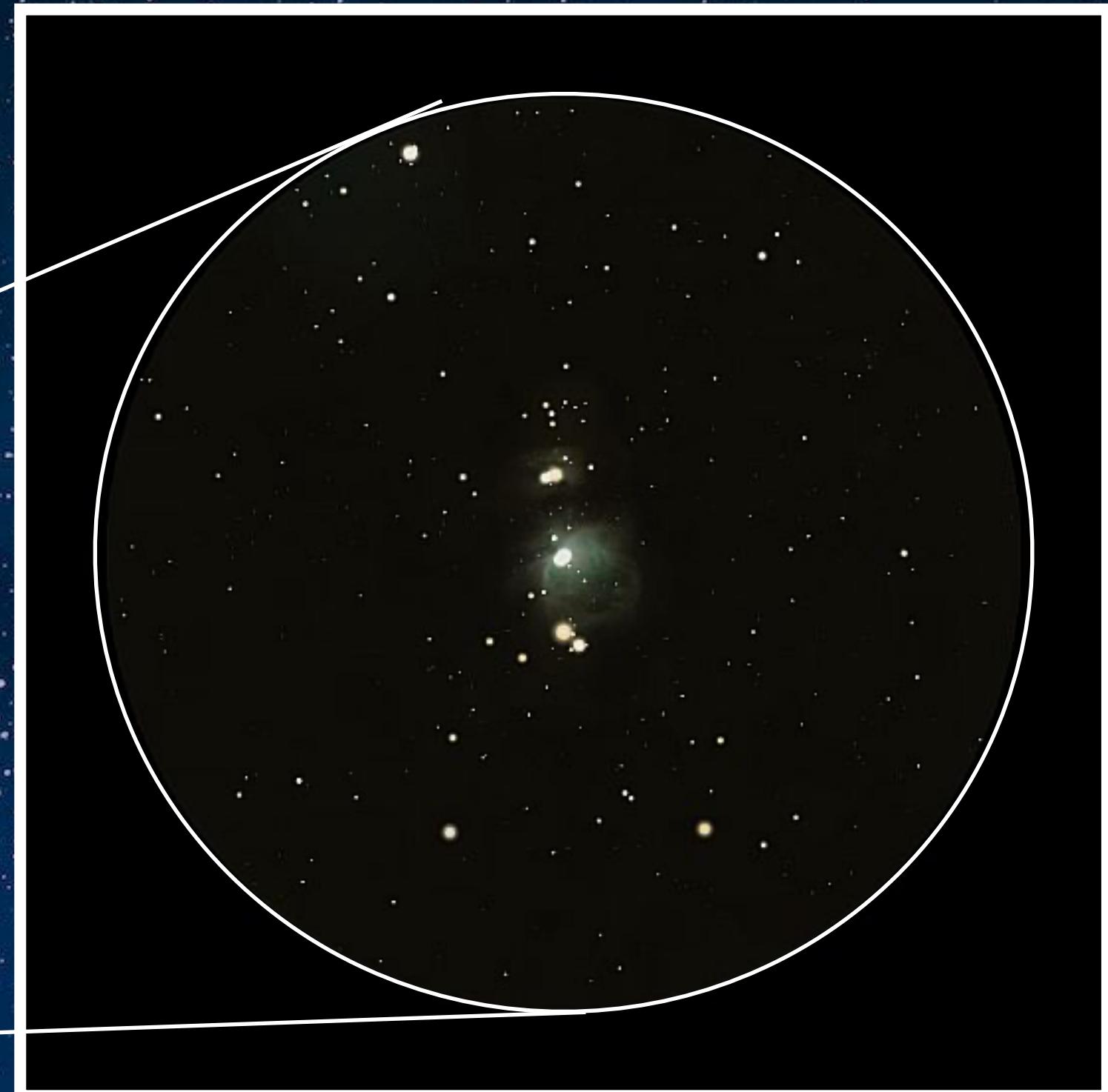


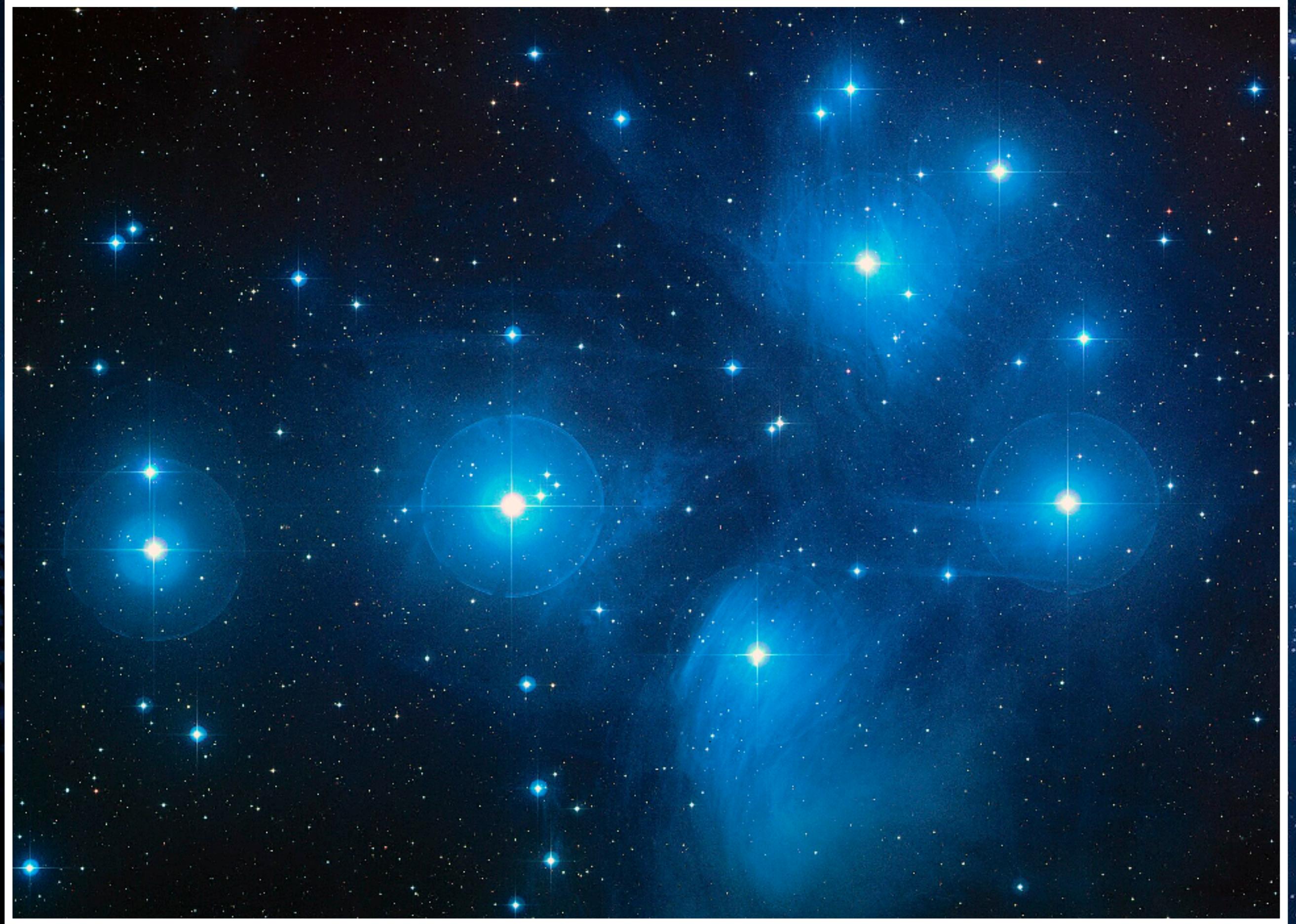
Saturn and Mercury
Look West
February 25th
Up to ~1 hour after Sunset



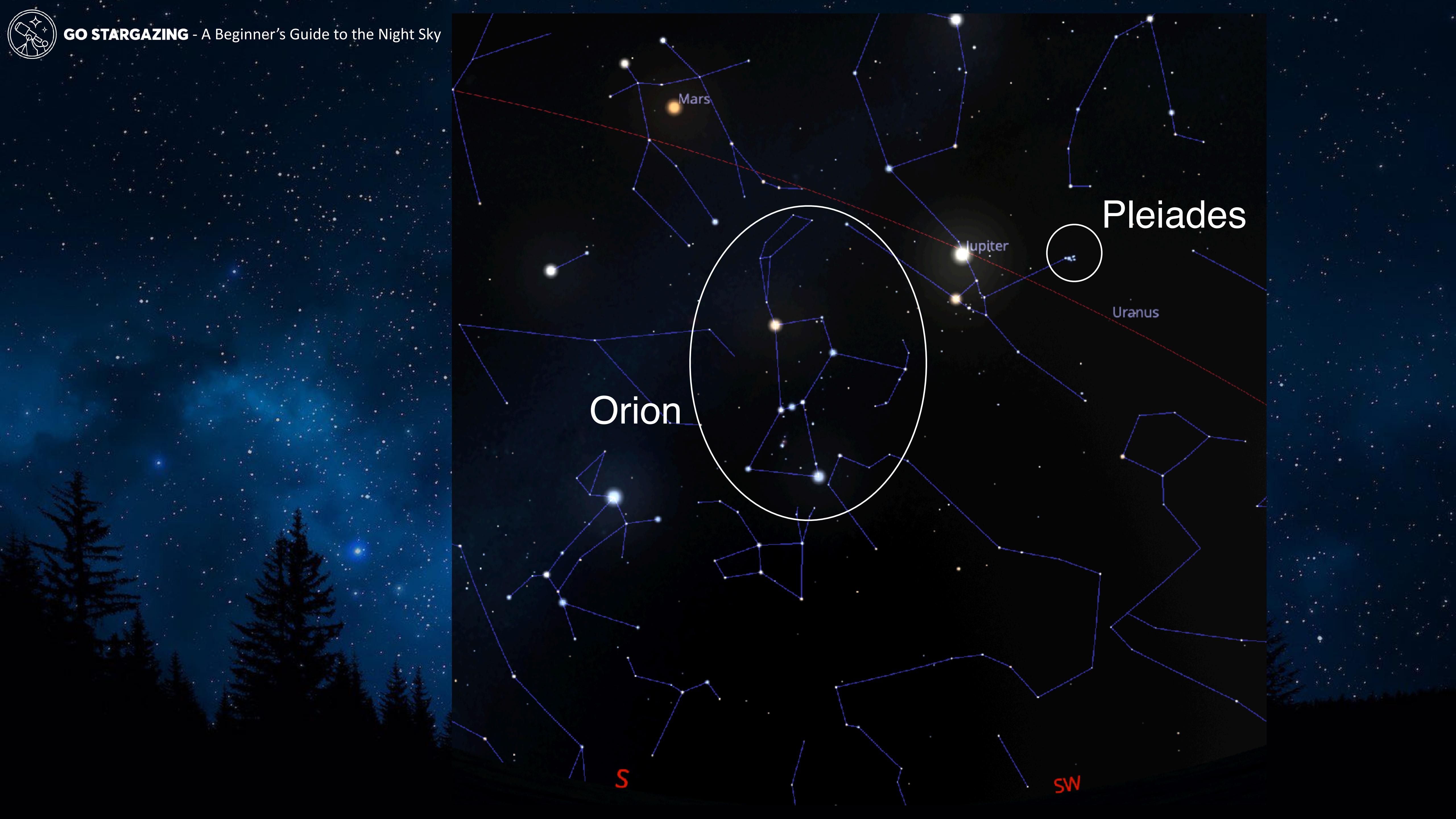


Binocular view



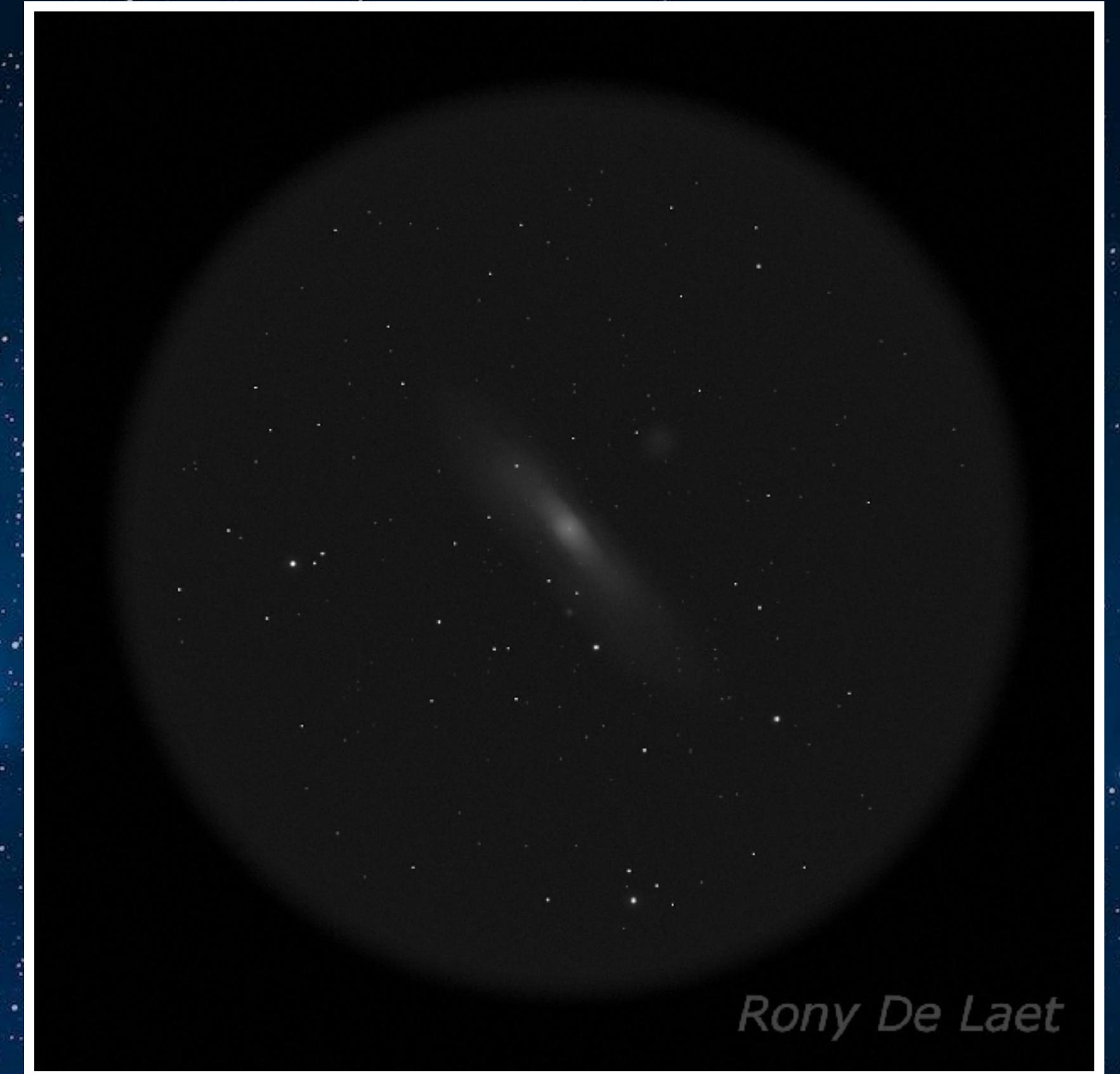


Rony De Laet





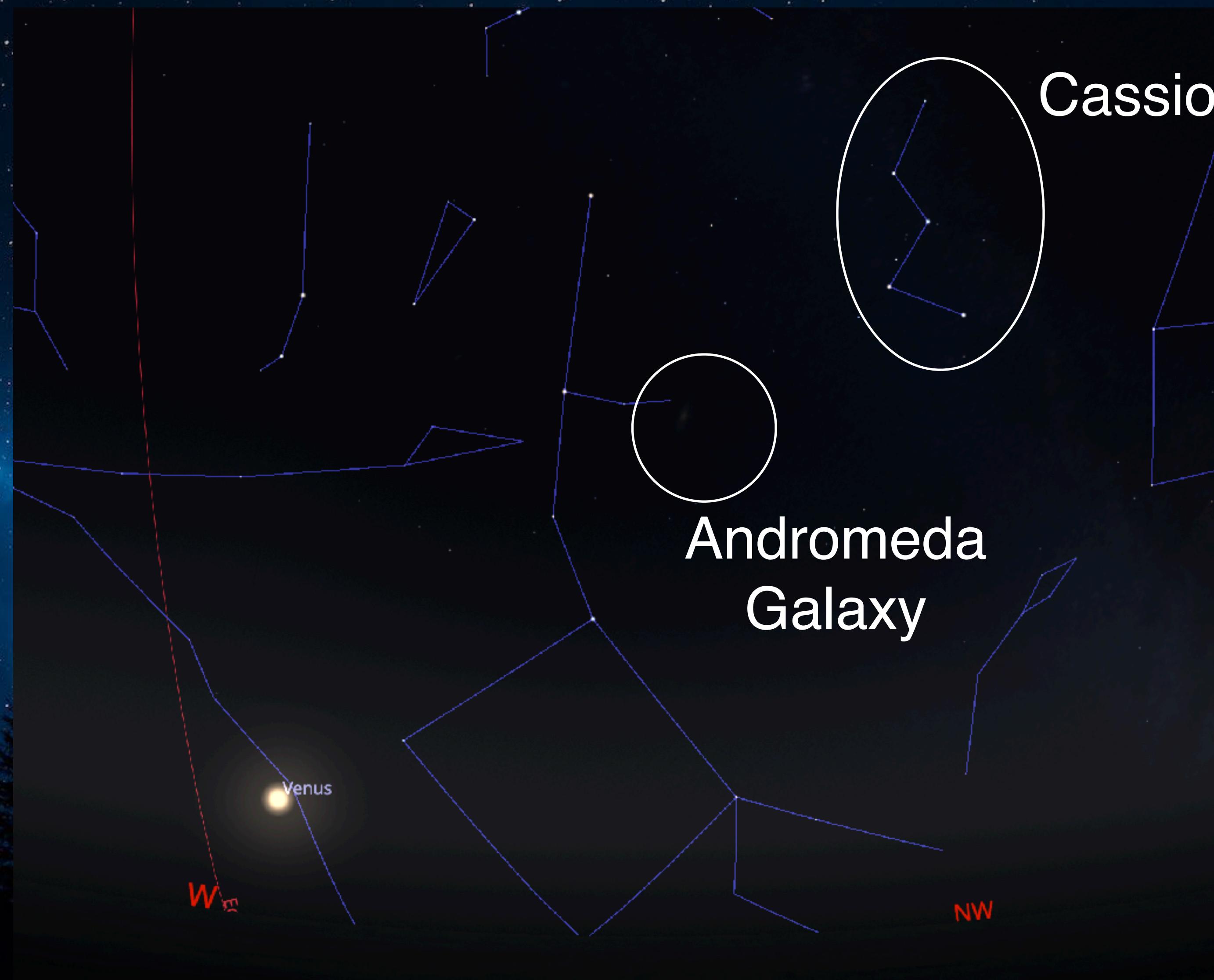
Andromeda



Look West
First ~half of night



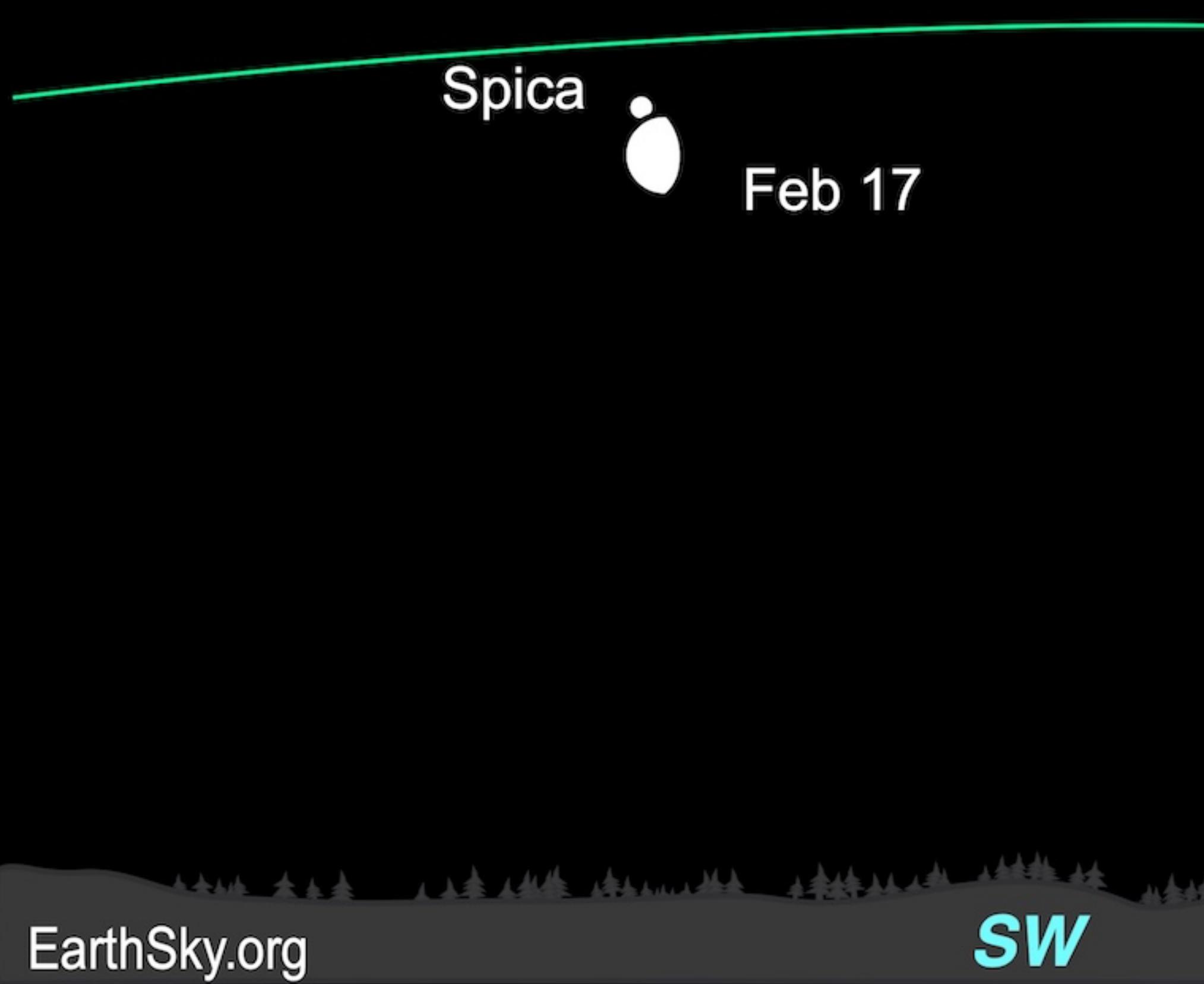
Andromeda



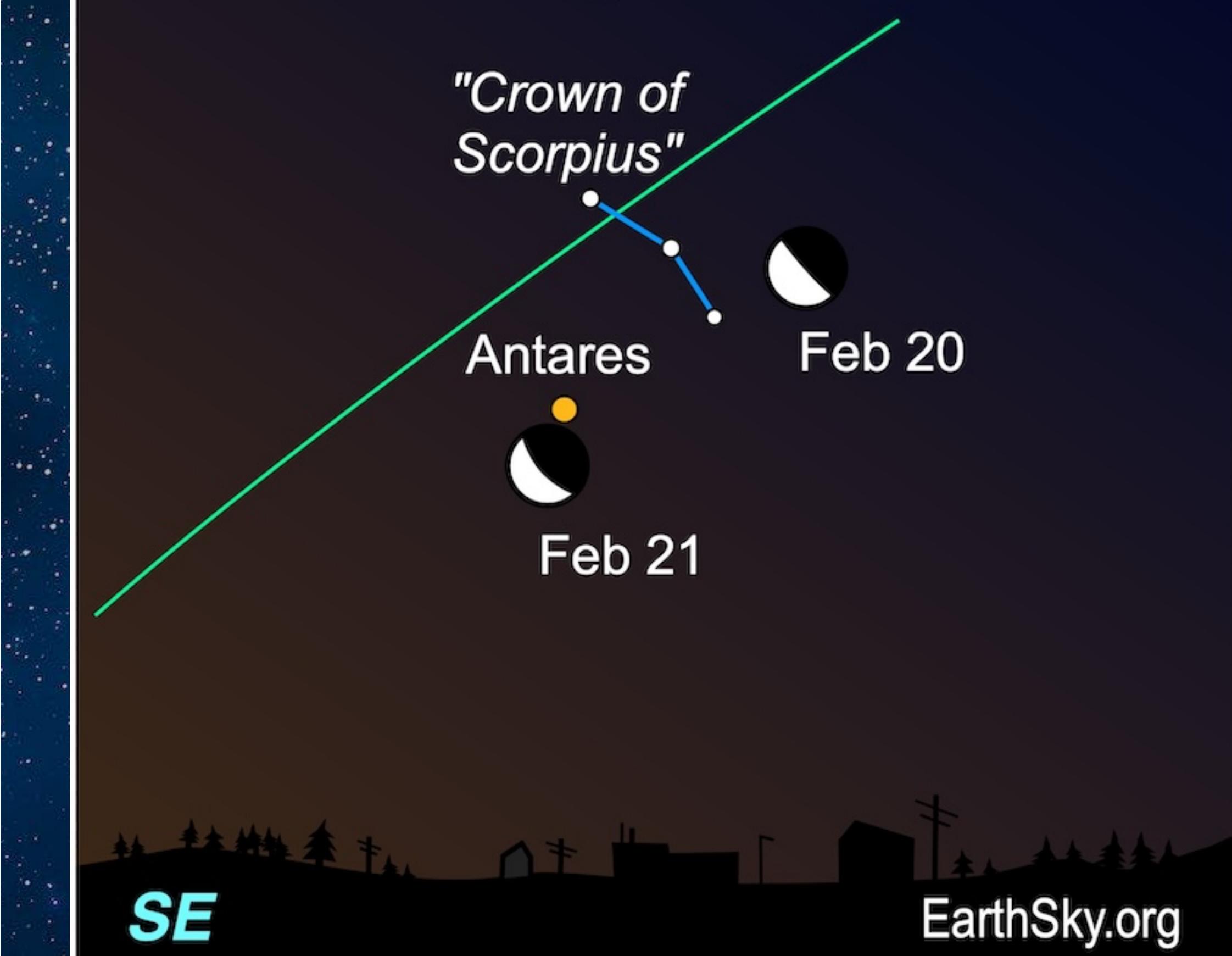


Moon & Star conjunctions

**February 2025 Mornings
Looking Southwest**



**February 2025 Mornings
Looking Southeast**





Waning Moon

February 2025 Mornings
Looking Southeast



Feb 23



"Teapot"

SE

EarthSky.org

February 2025 Mornings
Looking Southeast



Feb 25



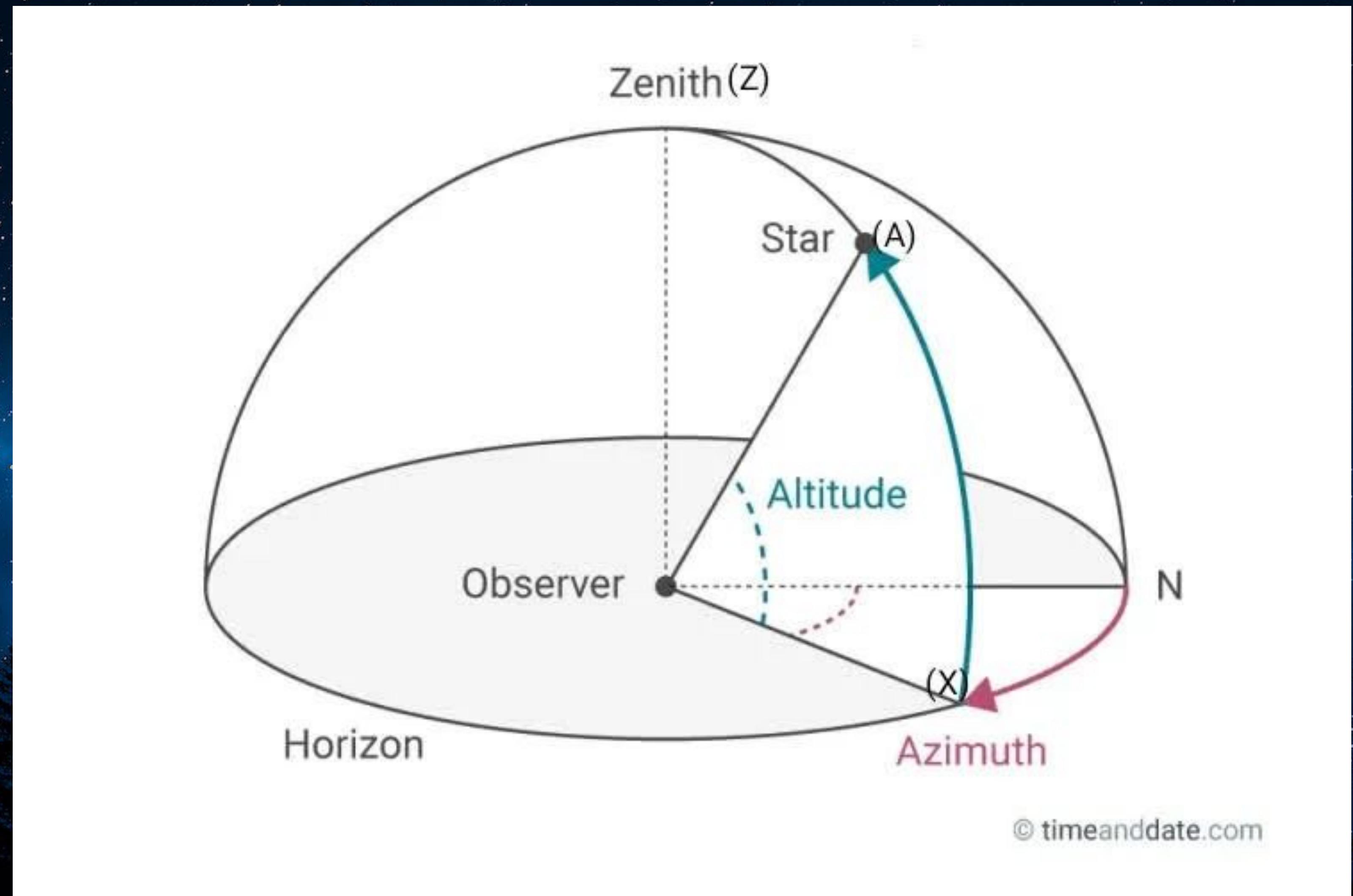
"Teapot"

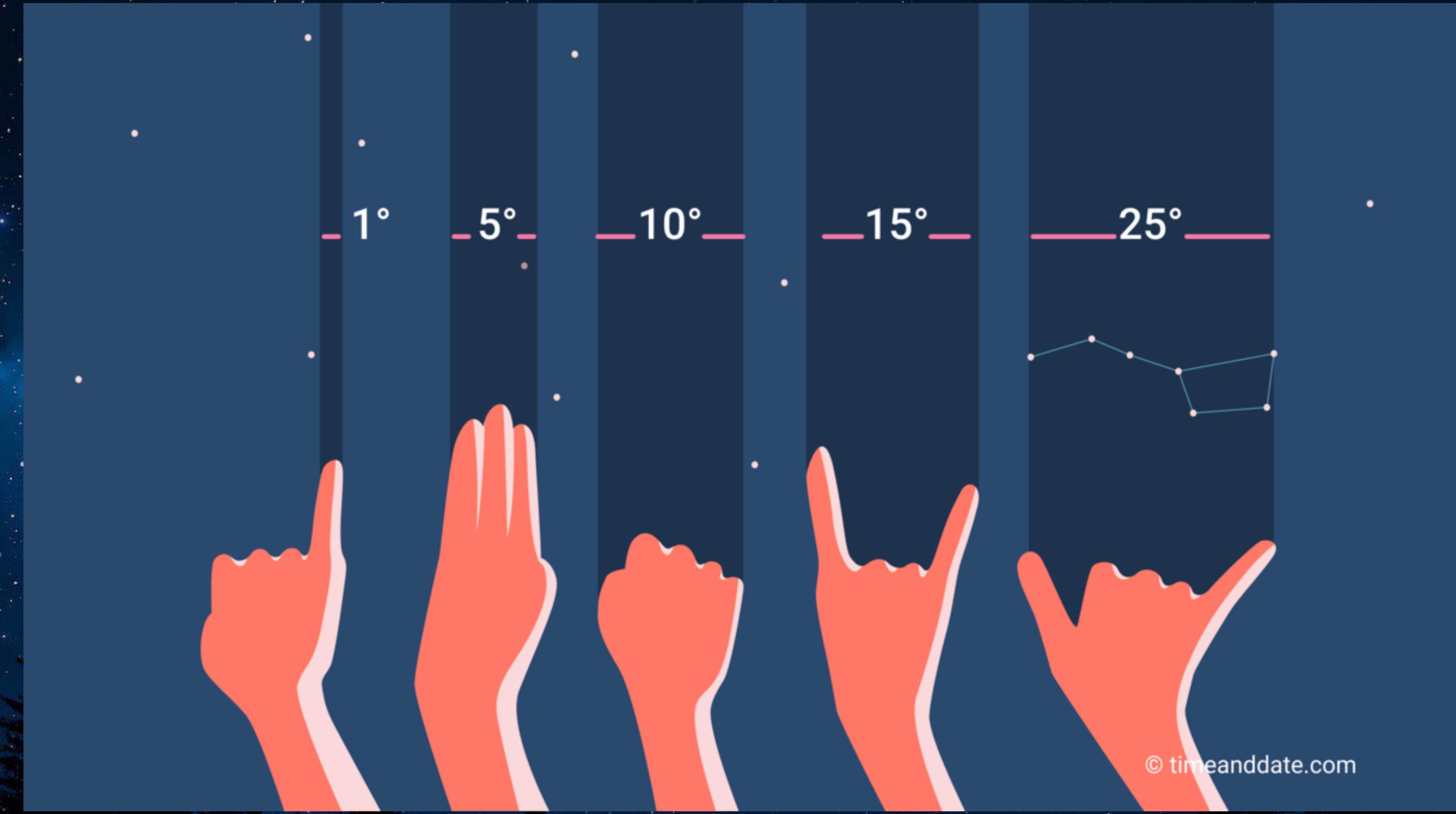
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EarthSky.org



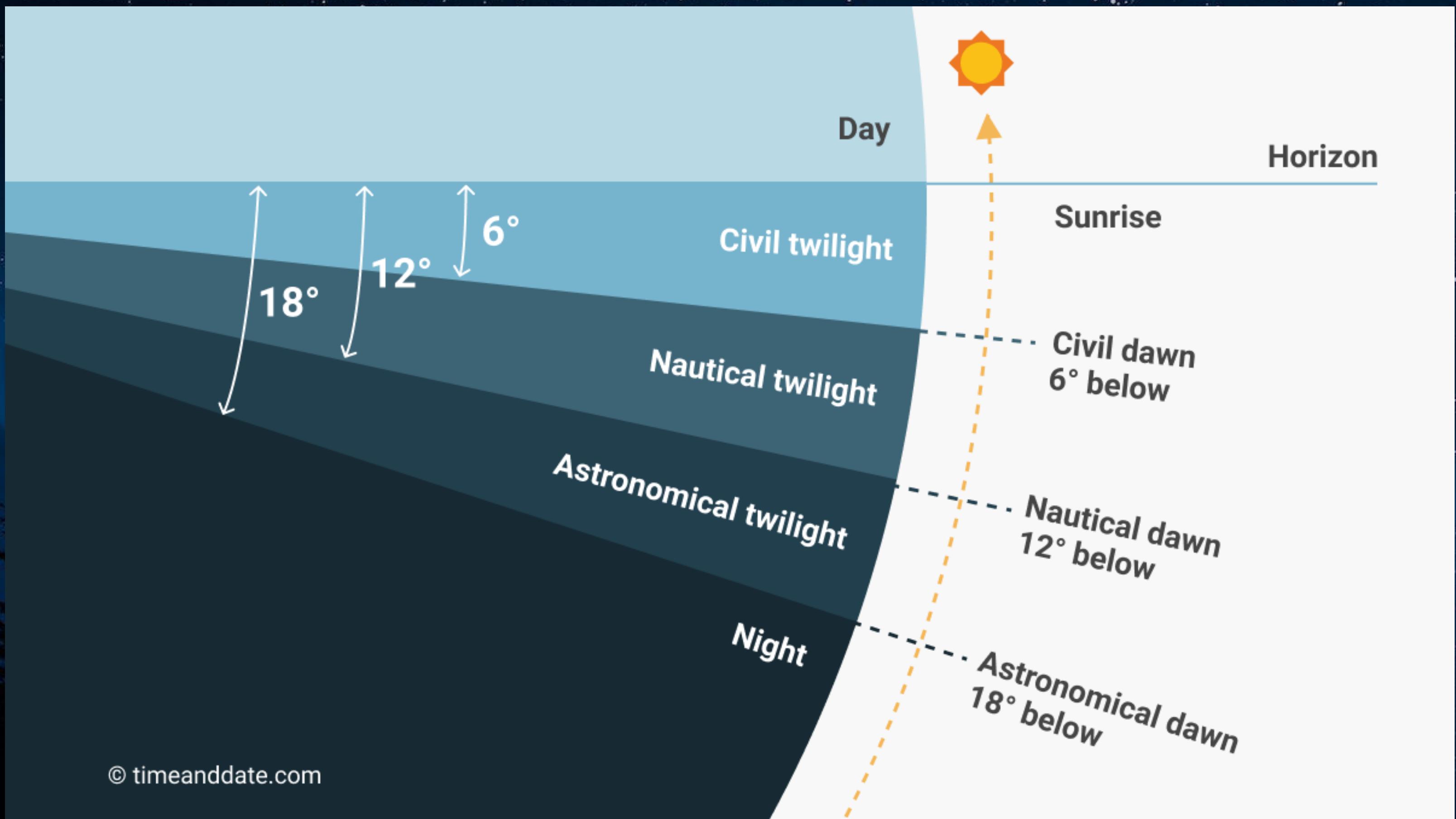
Getting your bearings







Sunset times



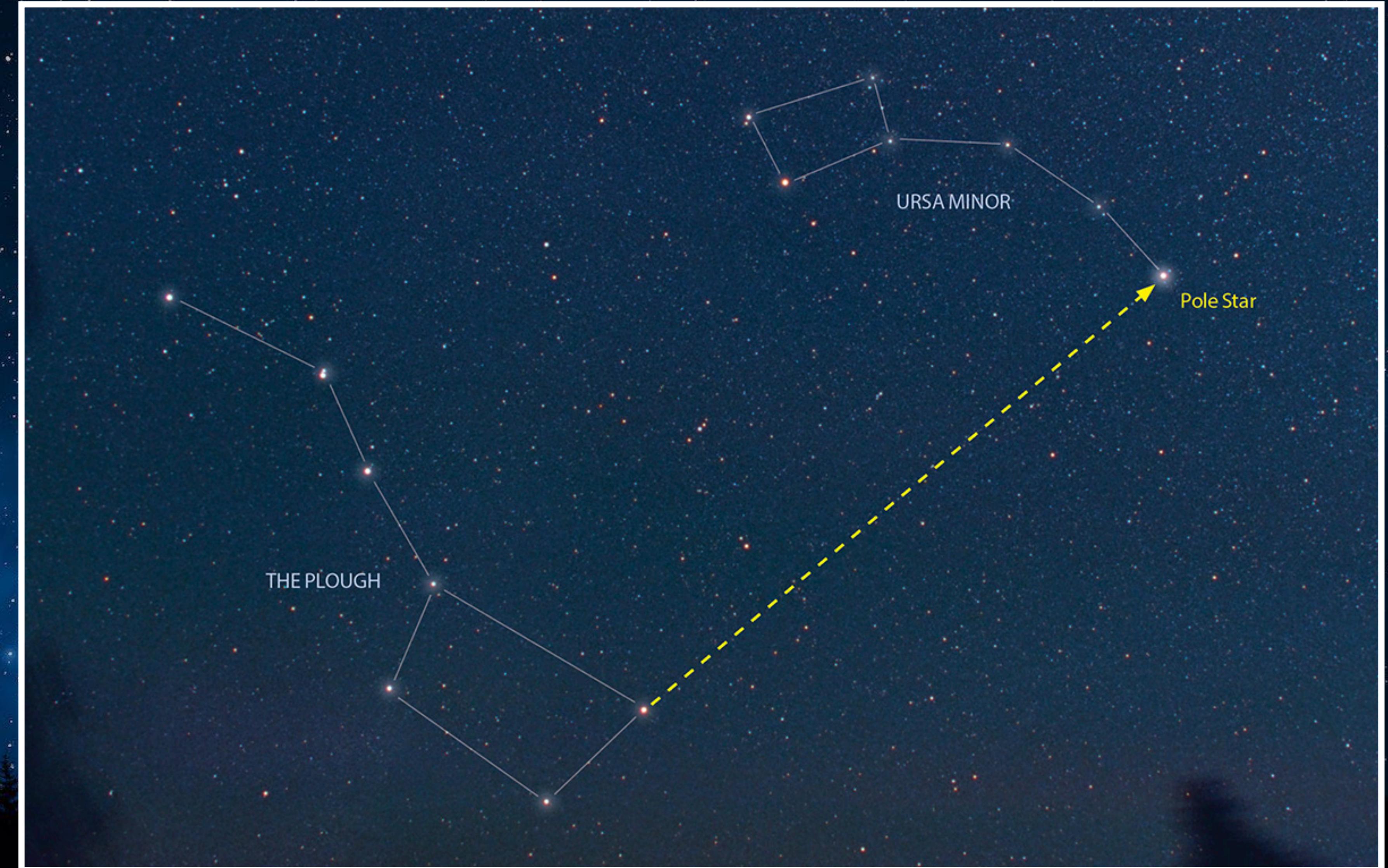
Casablanca
19th Feb

Sunrise 08:17
Sunset 19:12

Night:
20:41 to 06:47

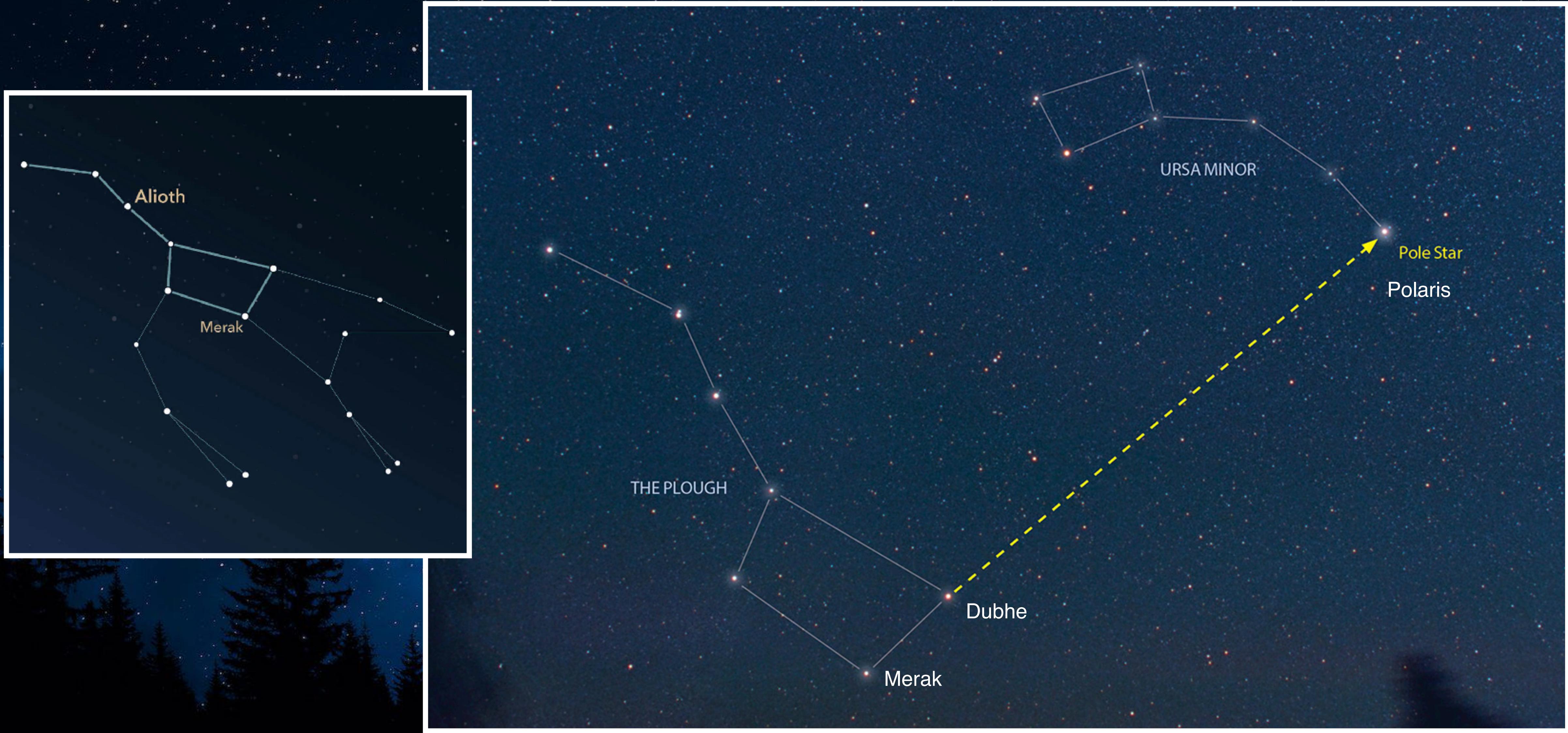


Ursa Major, Minor, and the Plough





Ursa Major, Minor, and the Plough



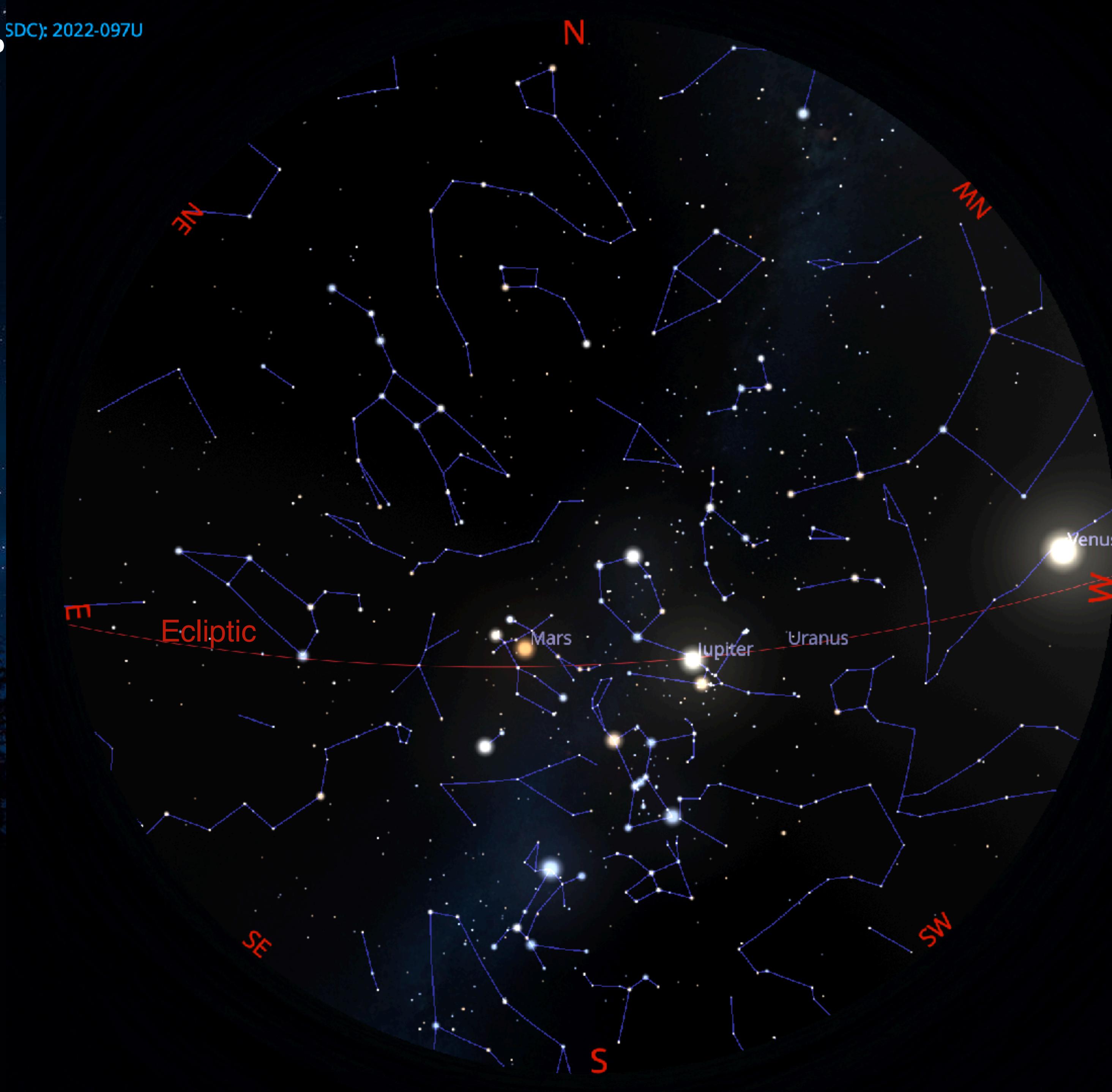


SDC: 2022-097U

Star chart

10pm tonight

Note compass directions.
Why are they flipped?





- Stargazing sessions – book in with Guest Services (18th, 21st, 23rd, 24th Feb)
- Another talk
- Lunch (25th Feb, book with Guest Services)
- Informal chats!

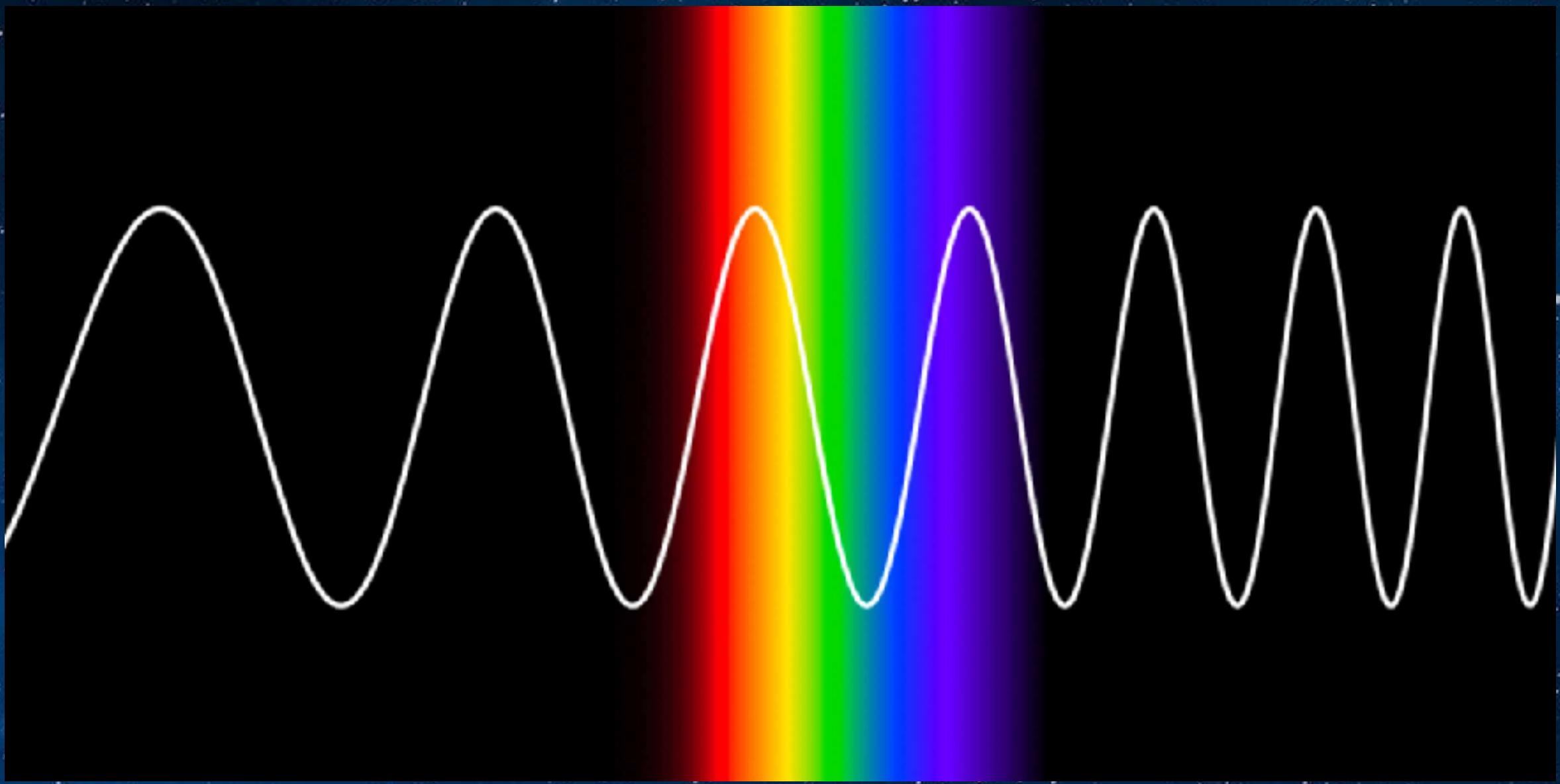


Stargazing sessions

- Stargazing sessions are usually held on Deck 10 (forward). Please note that these may not be accessible to those with mobility requirements.
- Where a stargazing session cannot be run due to the weather, I will do an informal indoor session (Q&A, software demo etc).
- Meeting time is 9:45 pm
- Limited spaces per session – book in!



Colours of the Universe: how astronomers look beyond the visible.



11am Thursday 20th February
Neptune Lounge
(Subject to change; check Daily Times)



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Clear skies!

gostargazing.co.uk