What's Up? March 1-31, 2025

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

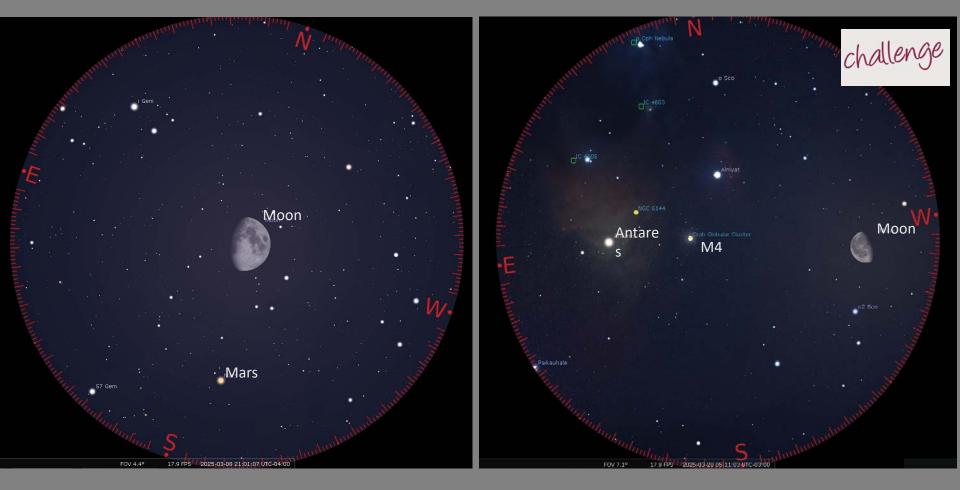
photo: David Hoskin

The Sun This Month Solar Activity

| Date | Sunset | Dusk End | Darkness | Dawn Start | Sunrise | "Noon" | Sunlight | Max Altitude |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------|----------|---------------|------------|------------|-----------|-----------------|
| Mar 1 | 6:02 p.m. | 7:39 p.m. | 9.6 h | 5:14 a.m. | 6:51 a.m. | 12:26 p.m. | 11.2 h | 38.1° |
| Mar 31 | 7:40 p.m. | 9:22 p.m. | 7.9 h | 5:15 a.m. | 6:56 a.m. | 1:18 p.m. | 12.8 h | 49.8° |
| Halifax Mar 01 Daylight Saving Time: March 9 @ 2 a.m. Halifax Mar 31 ight dusk dawn p.m. a.m. Equinox: March 20 6:01 a.m. | | | | | wn | | | |
| | | | | | <u>You</u> | Tube: RA | SC Halifa | <u>IX</u> |

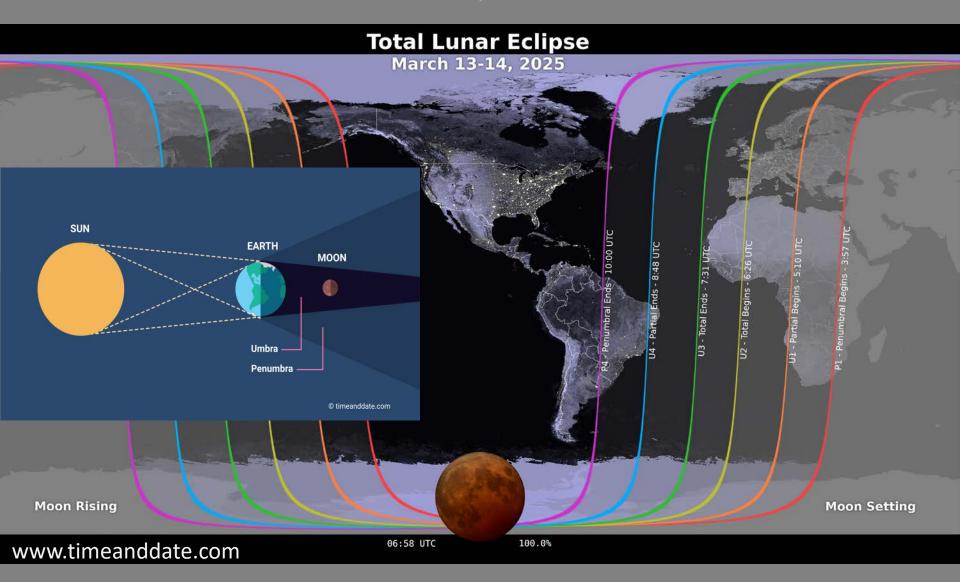
The Moon This Month

| Date | Phase | English | Mi'kmaq |
|----------|------------------------------|-------------------|--------------|
| March 1 | Moon at perigee (362,000 km) | | |
| March 5 | Moon near M45 | | |
| March 6 | First Quarter Moon | Maple Sugar | Siwkewiku's |
| March 8 | Moon near Mars | | |
| March 10 | Moon at perigee (356,900 km) | | |
| March 10 | Moon near M44 | | |
| March 14 | Full Moon | | |
| March 14 | Total lunar eclipse | | |
| March 17 | Moon at apogee (405,800 km) | | |
| March 20 | Moon near Antares | | |
| March 22 | Last Quarter Moon | | |
| March 29 | Partial solar eclipse | | |
| March 29 | New Moon | Birds Laying Eggs | Penatmuiku's |
| March 29 | Moon at perigee (358,100 km) | | |



Mar 8 @ 11:00 p.m. 15x70 binoculars FOV 4.4° Mar 20 @ 5:00 a.m. 7x50 binoculars FOV 7.1°

Total Lunar Eclipse on March 14

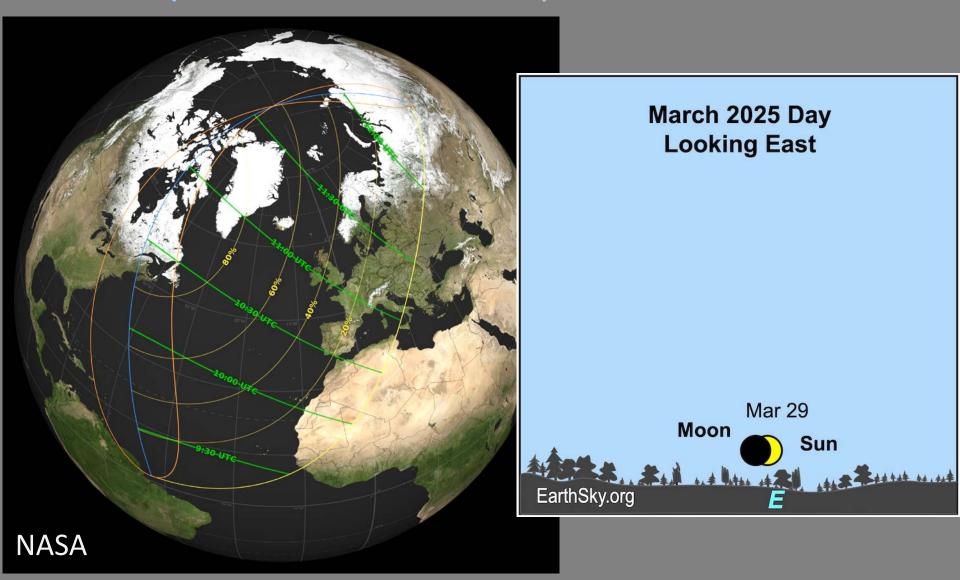


| Eclipse Stages Worldwide | UTC Time | Local Time in Halifax* | Visible in Halifax |
|--------------------------|--------------------|------------------------|--------------------|
| Penumbral Eclipse begins | Mar 14 at 03:57:28 | Mar 14 at 12:57:28 am | Yes |
| Partial Eclipse begins | Mar 14 at 05:09:40 | Mar 14 at 2:09:40 am | Yes |
| Full Eclipse begins | Mar 14 at 06:26:06 | Mar 14 at 3:26:06 am | Yes |
| Maximum Eclipse | Mar 14 at 06:58:43 | Mar 14 at 3:58:43 am | Yes |
| Full Eclipse ends | Mar 14 at 07:31:26 | Mar 14 at 4:31:26 am | Yes |
| Partial Eclipse ends | Mar 14 at 08:47:52 | Mar 14 at 5:47:52 am | Yes |
| Penumbral Eclipse ends | Mar 14 at 10:00:09 | Mar 14 at 7:00:09 am | Yes |

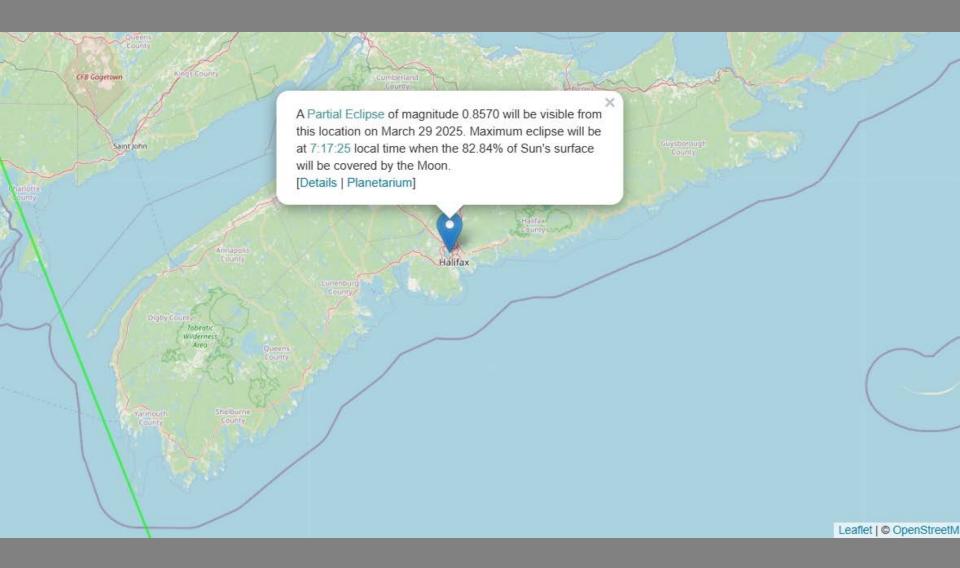


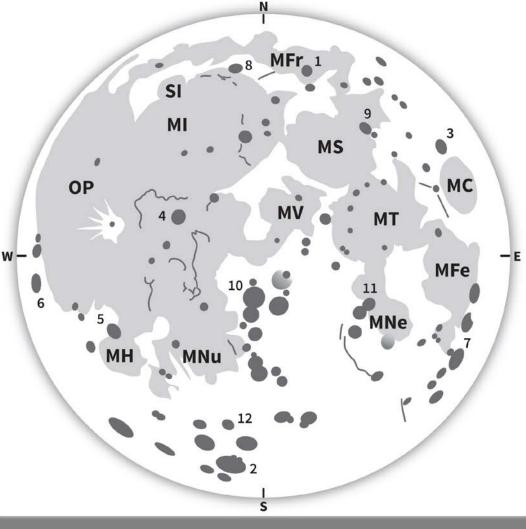
| Data | Value | Comments |
|------------------------------|---------------------|-------------------------------------------------------------|
| Magnitude | 1.178 | Fraction of the Moon's diameter covered by Earth's umbra |
| Obscuration | 100.0% | Percentage of the Moon's area covered by Earth's umbra |
| Penumbral magnitude | 2.260 | Fraction of the Moon's diameter covered by Earth's penumbra |
| Overall duration | 6 hours, 3 minutes | Period between the beginning and end of all eclipse phases |
| Duration of totality | 1 hour, 5 minutes | Period between the beginning and end of the total phase |
| Duration of partial phases | 2 hours, 33 minutes | Combined period of both partial phases |
| Duration of penumbral phases | 2 hours, 24 minutes | Combined period of both penumbral phases |

Deep Partial Solar Eclipse on March 29



The eclipse will begin before sunrise and end at 8:13 AST





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

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 Procellaru** best view March 12-16 after sunset The Moon in

Explore the Universe observe 3 of each in binos

The Planets in March

Mercury-visible low in the W (mag. -0.3) after sunset -maximum eastern elongation of 18° on 8 March -begins to fade by mid-March

- Venus -visible very low in the SW (mag. -4.6) after sunset until mid-March -emerges from morning twilight by the end of March
- Mars -visible in Gemini (mag. -0.2) after sunset -close to waxing gibbous Moon on 8 March
- Jupiter -prominent in Taurus (mag. -2.3) after sunset -near waxing gibbous Moon on 6 February
- Saturn -too close to the Sun so not visible this month
- Uranus -visible near the Aries and Taurus boundary (mag. 5.7) after sunset
- Neptune-too close to the Sun so not visible this month

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 (March 21-April 4)
-dust concentrated in the plane of the ecliptic and towards the Sun reflects sunlight



30 Mar 2025 @ 11:30 p.m.



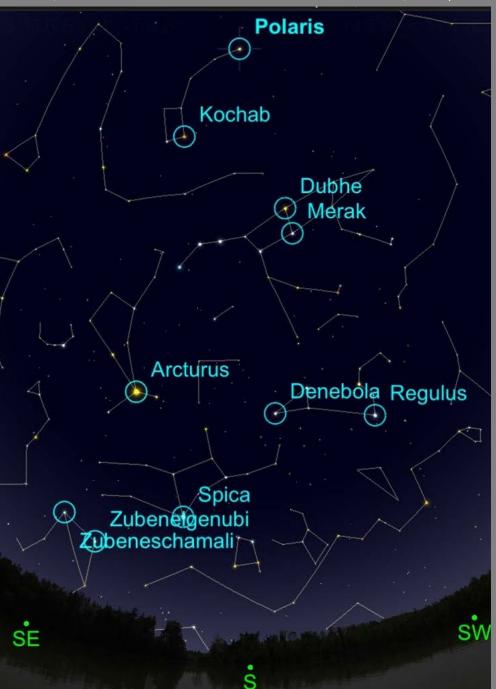
Explore the Universe: Spring Constellations

Explore the Universe

An Introduction to The Royal Astronomical Society of Canada's EtU Observing Program



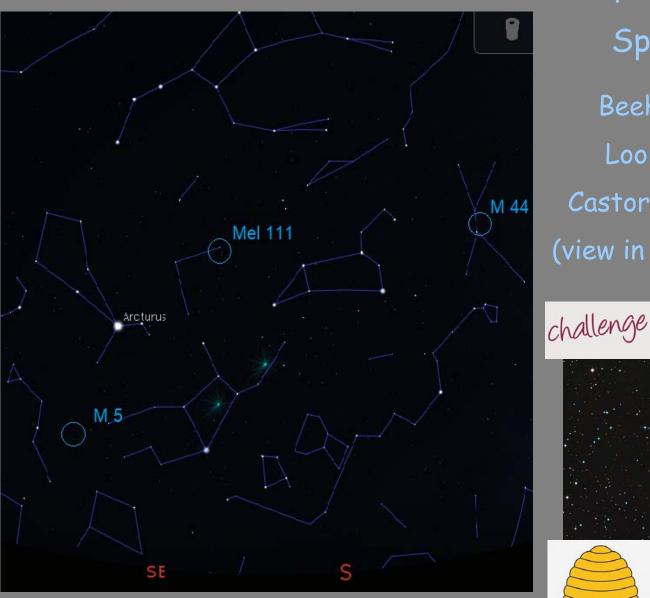
30 Mar 2025 @ 11:30 p.m.



Explore the Universe: Spring Stars Ranking: **#3** Arcturus #14 Spica #22 Regulus #37 Dubhe #48 Polaris - Denebola - Zubenelgenubi - Zubeneschamali

Halifax, NS

30 Mar 2025 @ 11:30 p.m.



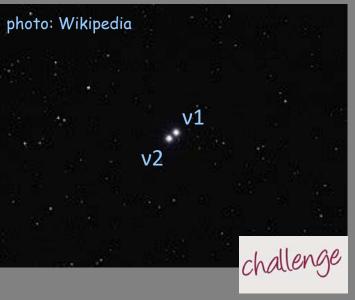
Explore the Universe: Spring Deep-Sky Beehive Cluster (M 44) Look halfway between Castor & Pollux and Regulus. (view in binoculars in dark sky)

photo: David Hoskin

Explore the Universe: Double and Multiple Stars

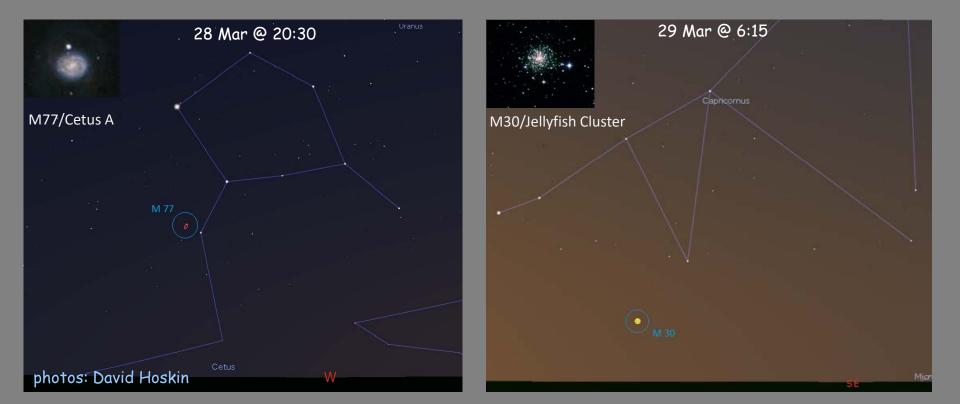


Nu Draconis (4.9, 4.9, 63") Double star (Kuma) in the "Head of the Dragon" Nu1 Dra (blue-white) Nu2 Dra (blue-white) Split with a telescope



Messier Marathon

March is the month for "Messier Madness" in which keen observers try to see all 110 Messier objects in a single night
nights of March 28-30 will be best this year
from a sufficiently dark location with good horizons, most Messier objects are visible with 10x50 binoculars
a specific sequence of targets must be followed to complete the Messier Marathon; <u>Messier Marathon Search Sequence List (seds.org)</u>



Questions?

photo: David Hoskin