What's Up? March 1-31, 2025

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

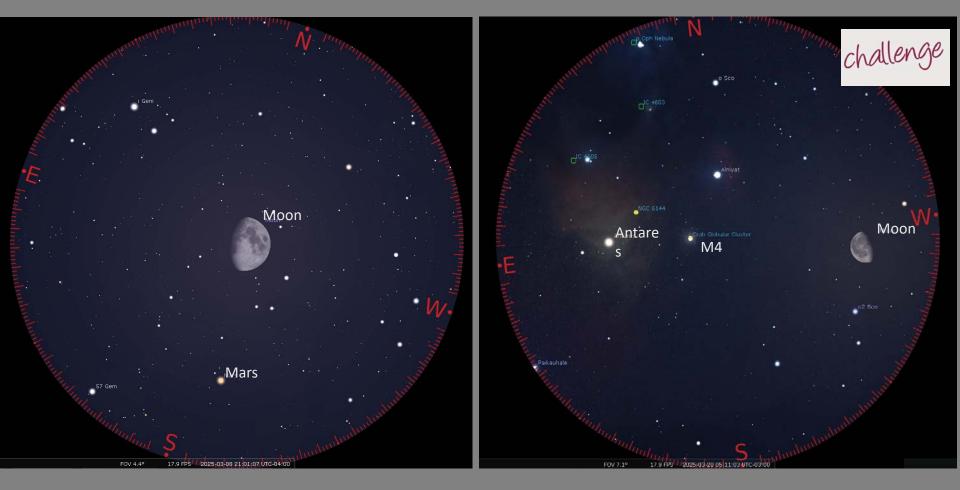
photo: David Hoskin

# 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>

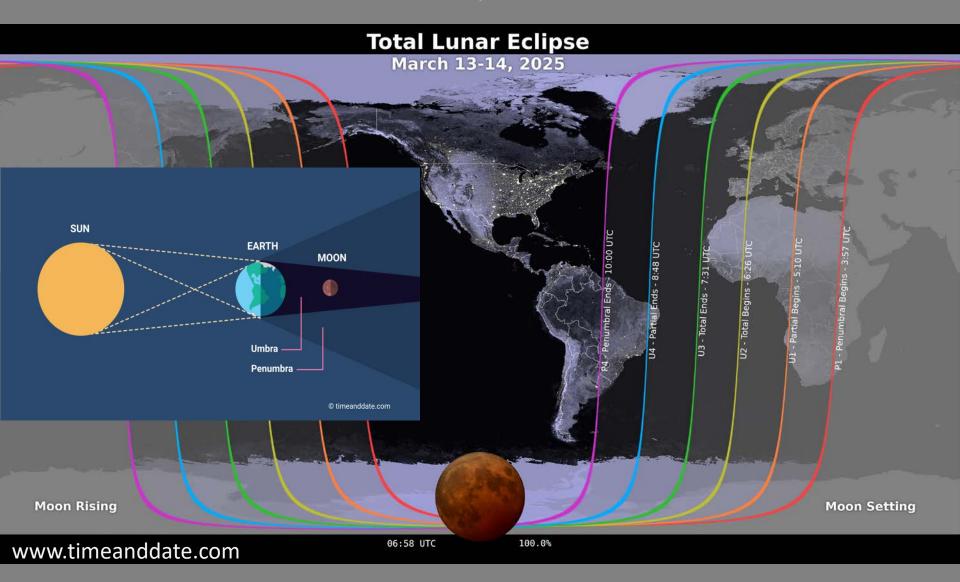
## The Moon This Month

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

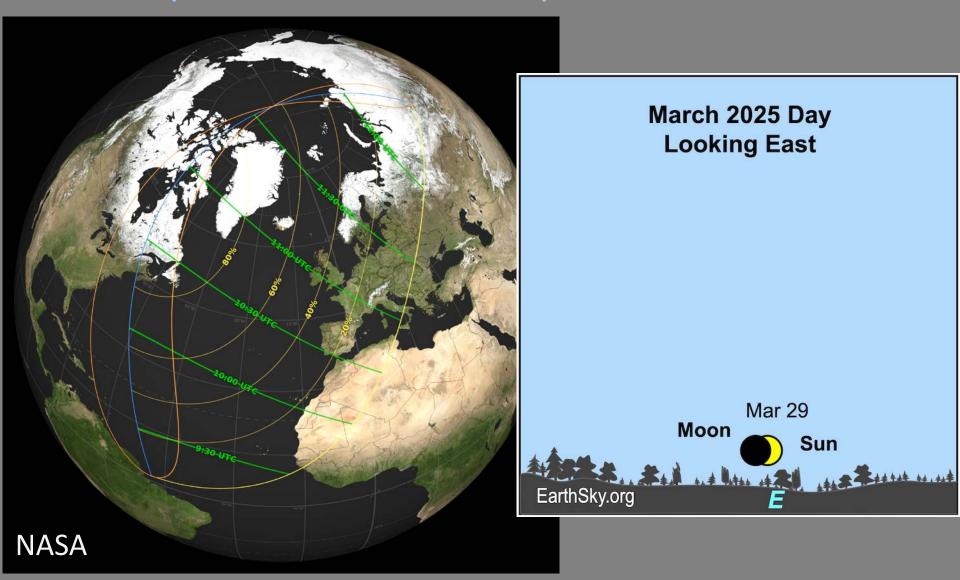


Eclipse Stages Worldwide	UTC Time	Local Time in Halifax*	Visible in Halifax
Penumbral Eclipse begins	Mar 14 at 03:57:28	Mar 14 at 12:57:28 am	Yes
Partial Eclipse begins	Mar 14 at 05:09:40	Mar 14 at 2:09:40 am	Yes
Full Eclipse begins	Mar 14 at 06:26:06	Mar 14 at 3:26:06 am	Yes
Maximum Eclipse	Mar 14 at 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

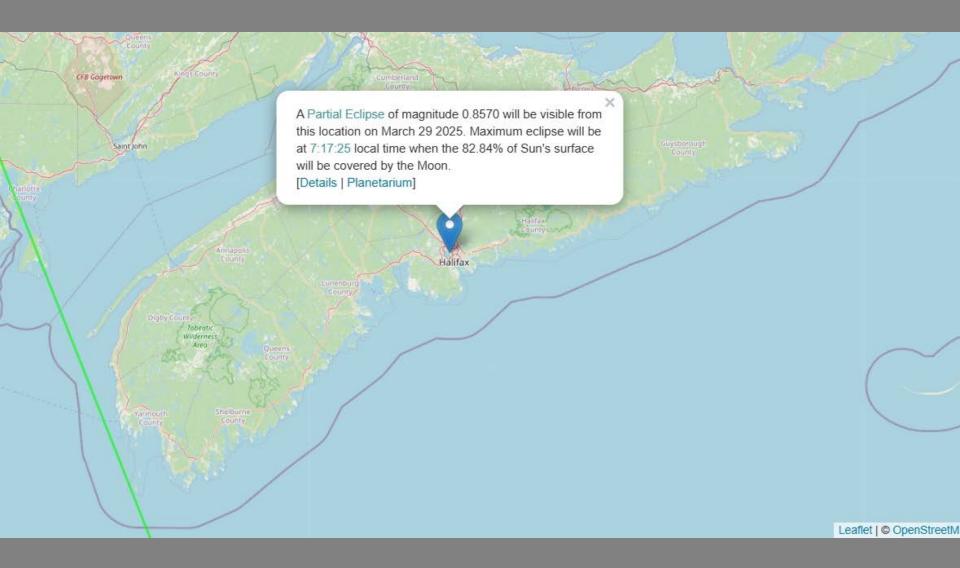


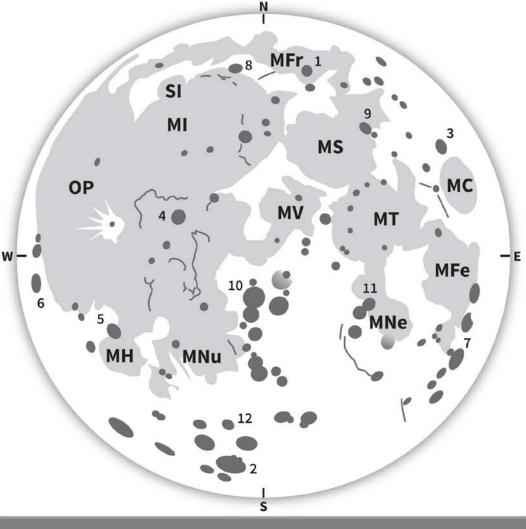
Data	Value	Comments
Magnitude	1.178	Fraction of the Moon's diameter covered by Earth's umbra
Obscuration	100.0%	Percentage of the Moon's area covered by Earth's umbra
Penumbral magnitude	2.260	Fraction of the Moon's diameter covered by Earth's penumbra
Overall duration	6 hours, 3 minutes	Period between 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.



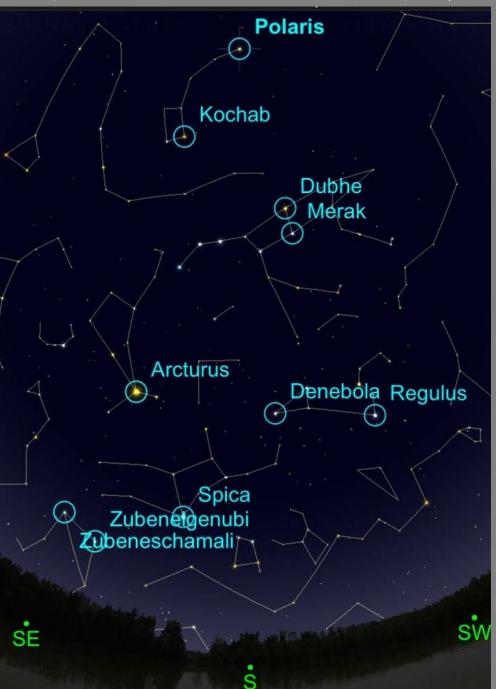
### Explore the Universe: Spring Constellations

#### Explore the Universe

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



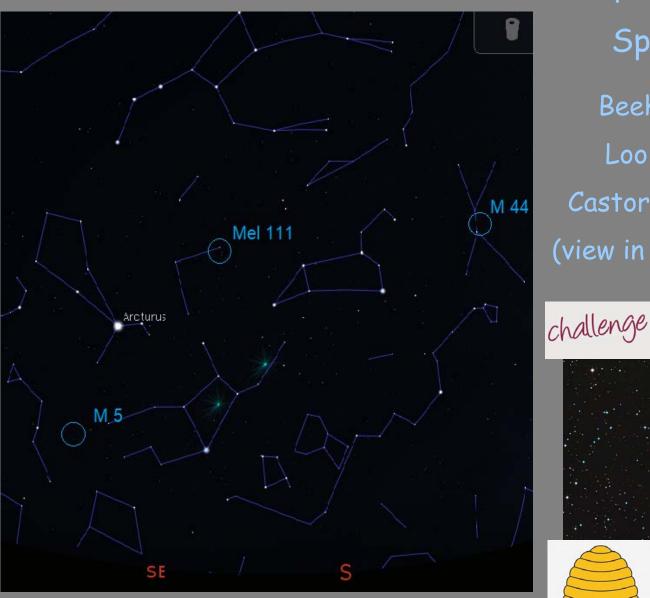
30 Mar 2025 @ 11:30 p.m.



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.



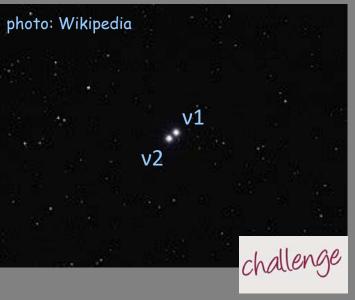
Explore the Universe: Spring Deep-Sky Beehive Cluster (M 44) Look halfway between Castor & Pollux and Regulus. (view in binoculars in dark sky)

photo: David Hoskin

#### Explore the Universe: Double and Multiple Stars

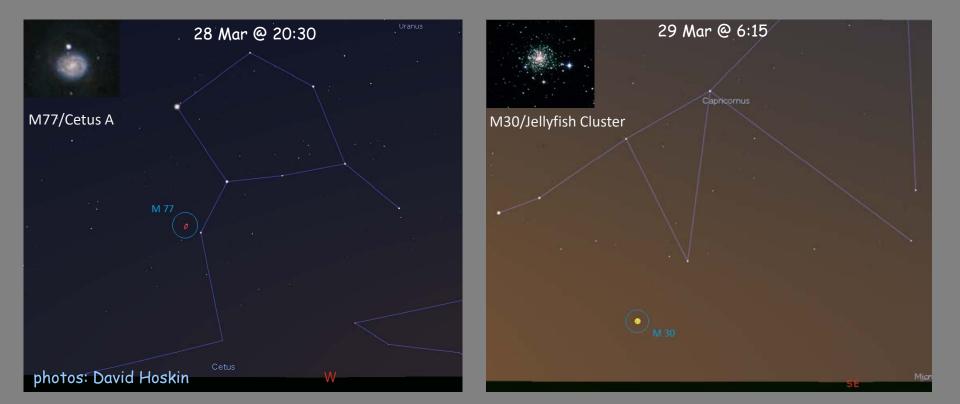


Nu Draconis (4.9, 4.9, 63") Double star (Kuma) in the "Head of the Dragon" Nu1 Dra (blue-white) Nu2 Dra (blue-white) Split with a telescope



#### 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