

What's Up?

May 1-31, 2025

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

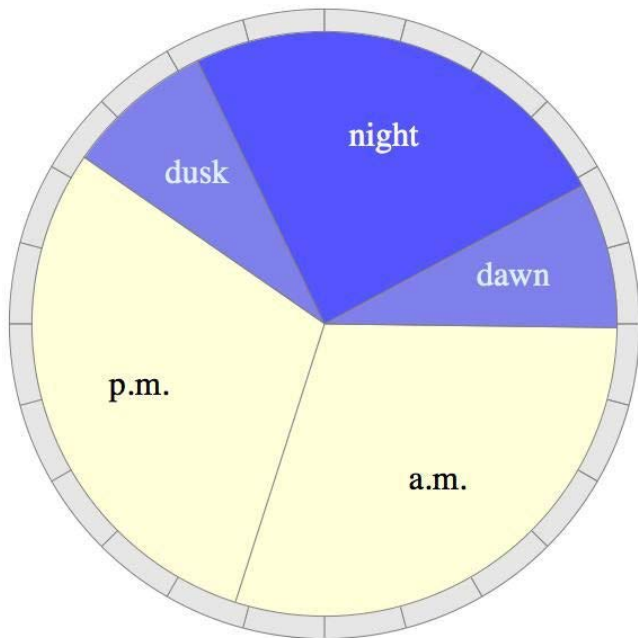
photo: David Hoskin

The Sun This Month

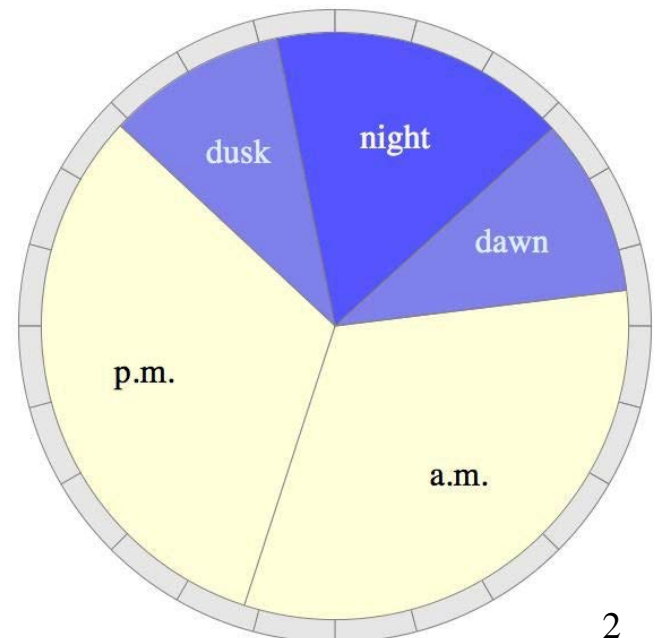
[Today's Solar Activity](#)

| Date | Sunset | Dusk End | Darkness | Dawn Start | Sunrise | “Noon” | Sunlight | Max Altitude |
|--------|-----------|------------|----------|------------|-----------|-----------|----------|--------------|
| May 1 | 8:19 p.m. | 10:16 p.m. | 5.8 h | 4:07 a.m. | 6:04 a.m. | 1:11 p.m. | 14.3 h | 60.7° |
| May 31 | 8:51 p.m. | 11:13 p.m. | 4.0 h | 3:11 a.m. | 5:32 a.m. | 1:12 p.m. | 15.3 h | 67.4° |

Halifax May 01



Halifax May 31



The Moon This Month

| Date | Phase | English | Mi'kmaq |
|-----------|---------------------------------|--------------------|------------------------------------|
| May 3 | Moon near Mars and M44 | | |
| May 4 | <i>First Quarter</i> | Frogs Croaking | <u>Sqoljuiku's</u> |
| May 5-6 | Eta Aquarids meteor shower peak | | |
| May 10 | Moon at apogee (406,200 km) | | |
| May 12 | <i>Full Moon</i> | | |
| May 13-14 | Moon near Antares and M4 | | |
| May 20 | <i>Last Quarter</i> | | |
| May 22 | Moon near Saturn | | |
| May 23-24 | Moon near Venus | | |
| May 25 | Moon at perigee (359,000 km) | | |
| May 27 | <i>New Moon</i> | Trees Fully Leafed | <u>Nipniku's</u> |
| May 31 | Moon near Mars | | |



Waxing crescent Moon, Mars and M44
Binocular view (15x70) FOV 4.4°
@ 10:30 p.m. on 3 May



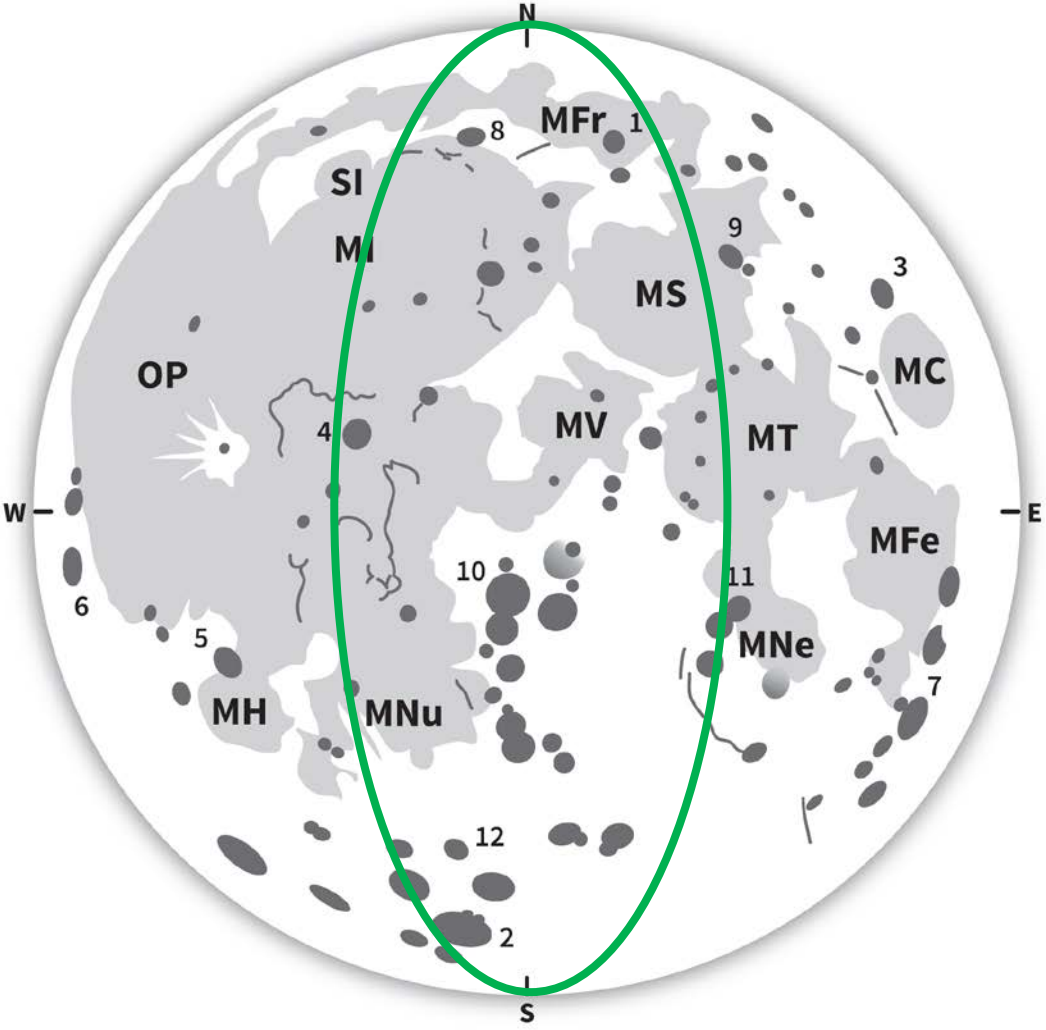
Nearly full Moon, Antares and M4
Binocular view (15x70) FOV 4.4°
@ 11:00 p.m. on 13 May



Waxing crescent Moon and Mars

Binocular view (7x50) FOV 7.1°

@ 11:00 p.m. on 31 May



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 May 2-6 after sunset

The Moon in

Explore the Universe

observe 3 of each in binoculars

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

Lunar V and Lunar X

V →

X →

photos: David Hoskin

Ukert

La Caille
Bianchini
Purbach

-look at 9 p.m. ADT on May 4 for this clair-obscur effect

Mare Orientale

challenge

Exploring the moon!

Mare Orientale

MC
OR
LV
IR
Outer Rook
Lacus Veris
Inner Rook
LV
OR
MC

Grimaldi
Lacus Autumni
Montes Cordillera
Crüger
Eichstadt

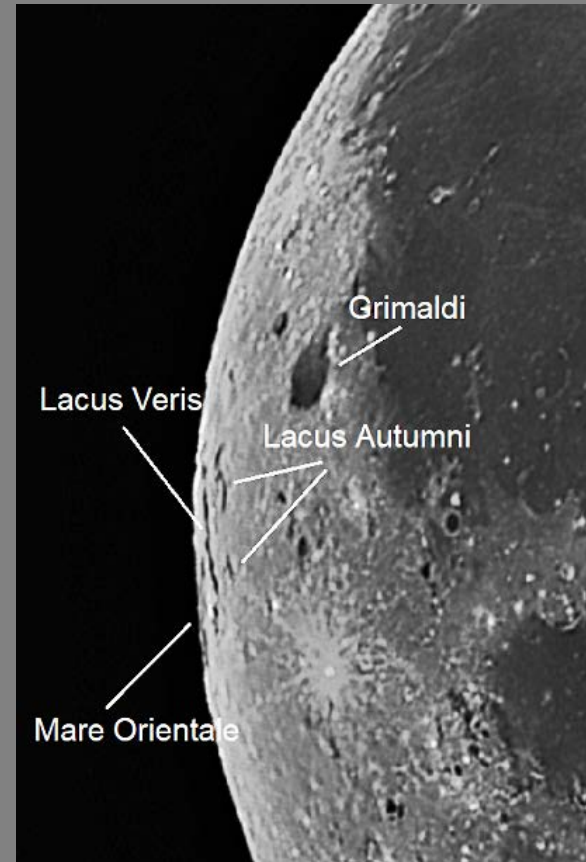
Mare Oriental

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!

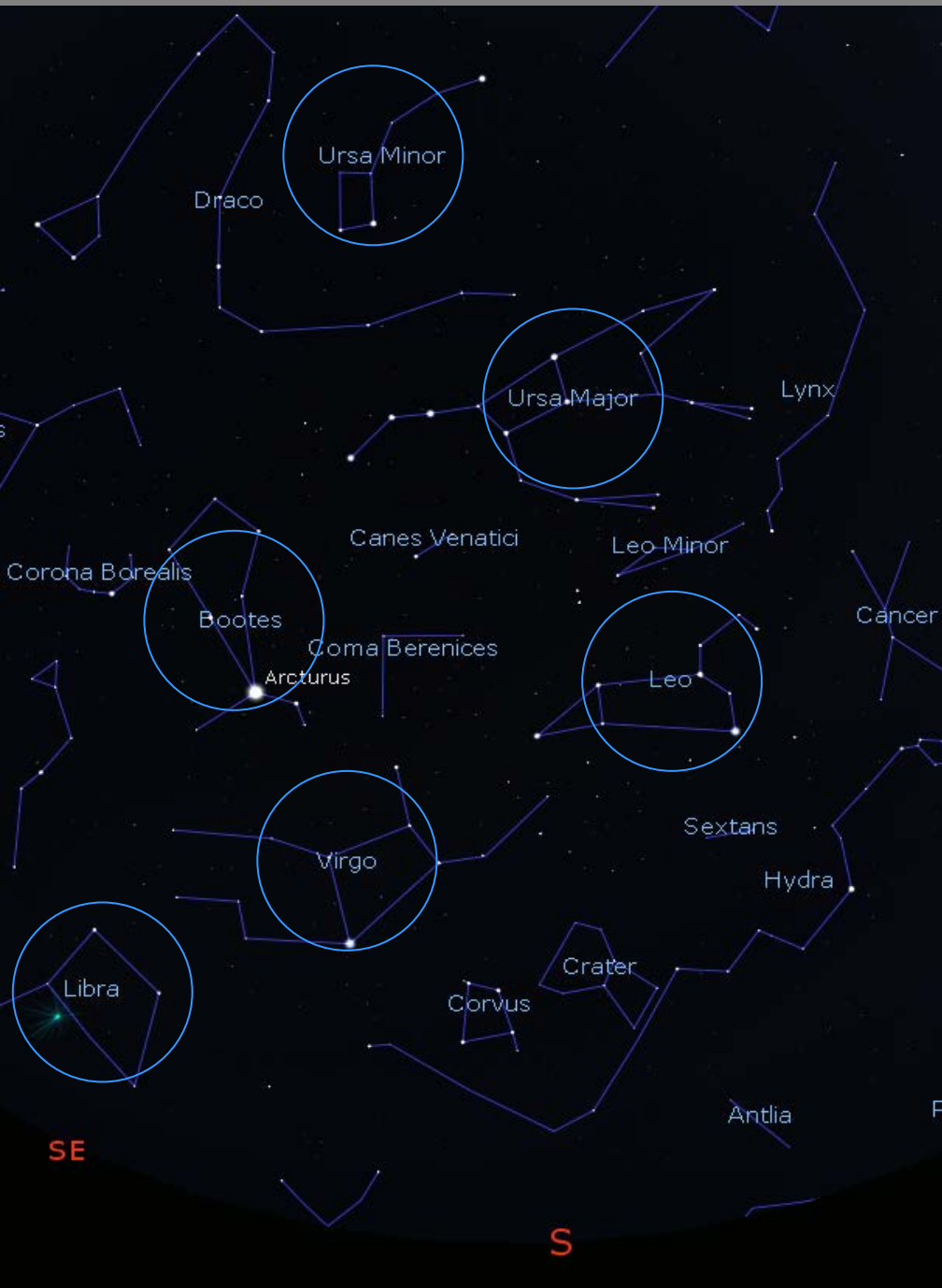
Identifying Oriente's fascinating features demands steady seeing and moderate to high magnification.



-look at 5 a.m. ADT on May 20 for favorable western libration exposing Mare Orientale

Nice wide-angle photo-op before dawn @ 4:30 a.m. on 23 May





Explore the Universe: Spring Constellations





Explore the Universe:

Spring Stars

Ranking:

#3 Arcturus

#14 Spica

#22 Regulus

#37 Dubhe

#48 Polaris

- Denebola

- Zubenelgenubi

- Zubeneschamali



Explore the Universe: Spring Deep-Sky

Messier 5 (NGC 5904)

Ancient densely populated
globular cluster in Serpens
(view in binoculars in dark sky)



photo: David Hoskin

Explore the Universe: Double and Multiple Stars

- Adhafera/Zeta Leonis (mag. 3.4) and 35 Leonis (mag. 5.9) are an optical double
- Adhafera comes from the Arabic "the braid/curl" referring to the lion's mane
- Adhafera and 35 Leonis are 174 light years from each other



The Eta Aquariid Meteor Shower

- Eta Aquariid radiant is in Aquarius; source is Comet Halley debris
- peak is night of May 5-6
- expect 10-30 meteors per hour at a dark sky site
- persistent trains are likely but few fireballs
- best time to view is before dawn after the Moon has set



Questions?



photos: David Hoskin