What's Up? June 1-30, 2024

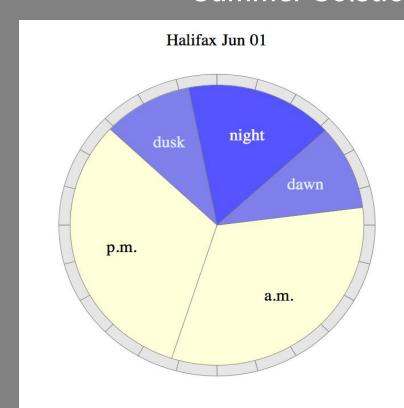
Made with the 2024 RASC Observer's Handbook, 2024 Night Sky Almanac, Sky Safari®, and Stellarium®

photo: David Hoskin

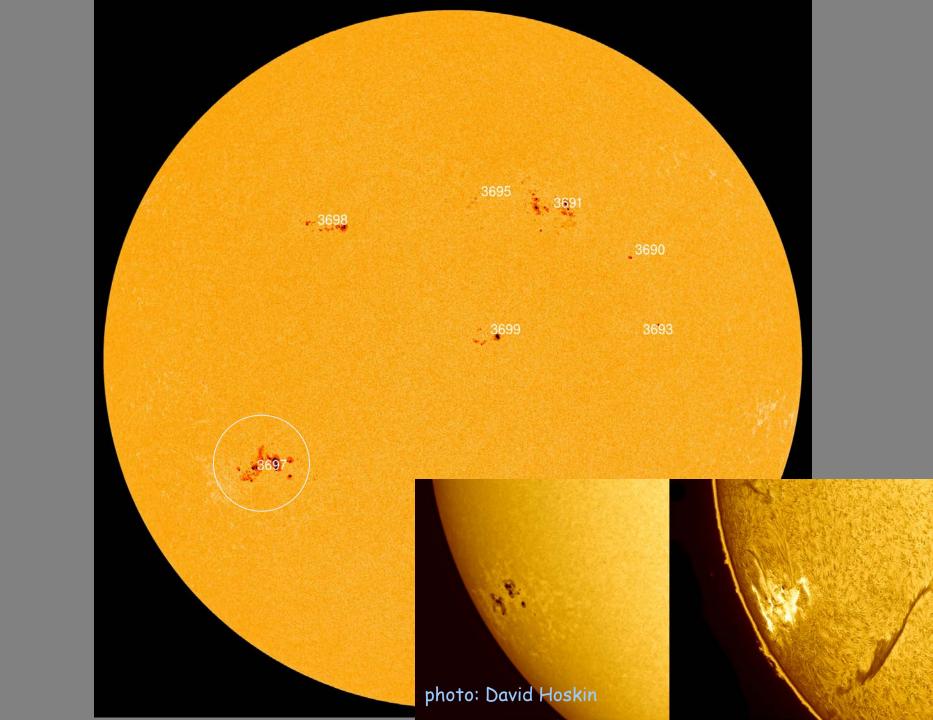
# The Sun This Month Today's Solar Activity

Date	Sunset	Dusk End	Darkness	Dawn Start	Sunrise	"Noon"	Sunlight	Max Altitude
June 1	8:53 p.m.	11:15 p.m.	3.9 h	3:10 a.m.	5:31 a.m.	1:12 p.m.	15.4 h	67.5°
June 30	9:03 p.m.	11:31 p.m.	3.6 h	3:04 a.m.	5:32 a.m.	1:18 p.m.	15.5 h	68.5°

## Summer Solstice: June 20 at 5:50 p.m.







## Noctilucent Clouds

Sunlight below the horizon reflects off tiny ice crystals at 76-85 km



Visible in summer months during astronomical twilight (50-70° latitude)

# The Moon This Month

Date	Phase	English	Mi'kmaq
June 2	Moon at perigee (368,100 km)	Frogs Croaking	<u>Sqoljuiku's</u>
June 2-3	Moon near Mars		
June 6	New Moon	Trees Fully Leafed	Nipniku's
June 9	Moon near Beehive Cluster		
June 14	Moon at apogee (404,100 km)		
June 14	First Quarter Moon		
June 19	Moon near M4 and Antares		
June 22	Full Moon		
June 27	Moon at perigee (369,300 km)		
June 27	Moon near Saturn		
June 28	Last Quarter Moon		



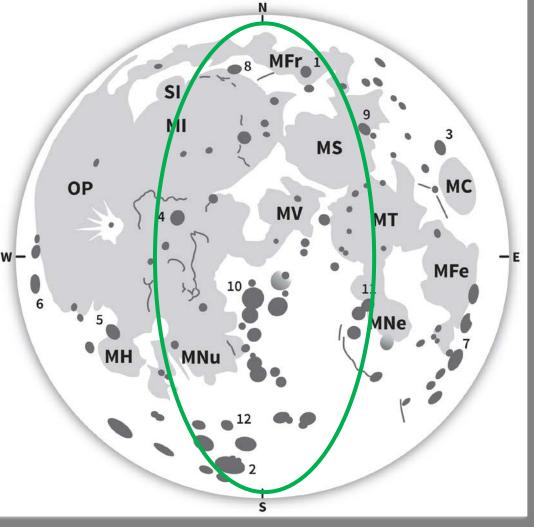
June 9 @ 10:30 p.m. Photo Opportunity - APS-C sensor and 135mm lens





June 19 @ 10:30 p.m. 7x50 binoculars

June 27 @ 4:30 a.m. 7x50 binoculars



#### 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



#### 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

### Best between June 12-16

The Moon in

Explore the Universe

observe 3 of each in binos

#### The Planets in June

Mercury-visible low in the E (mag. -1.0) before sunrise the first week of June, then disappears into morning twilight until reappearing low in the W after sunset the last week of June.

Challenge

Venus -too close to the Sun to be visible in June

Mars -visible in Aries (mag. 1.1) in the pre-dawn sky -close to the waning crescent Moon on June 2-3

Jupiter -appears in Taurus before sunrise at the start of June (mag. -2.0)

Saturn -rises in the E (mag. 1.2) after 2 a.m. at the start of June -close to the waning gibbous Moon on May 27

Uranus -emerges (mag. 5.8) from the Sun's glare in the pre-dawn sky at the start of June

Neptune-visible in Pisces (mag. 7.9) in the pre-dawn sky

Halifax, NS 25 June 2024 @ 11:30 pm Cygnus Lyra Hercules Aquila Sagittarius Scorpius Capricornus/ SE

Explore the Universe:

Summer Constellations

twilight ends late:

~11:30 p.m.



## Explore the Universe:

Summer Stars

Ranking:

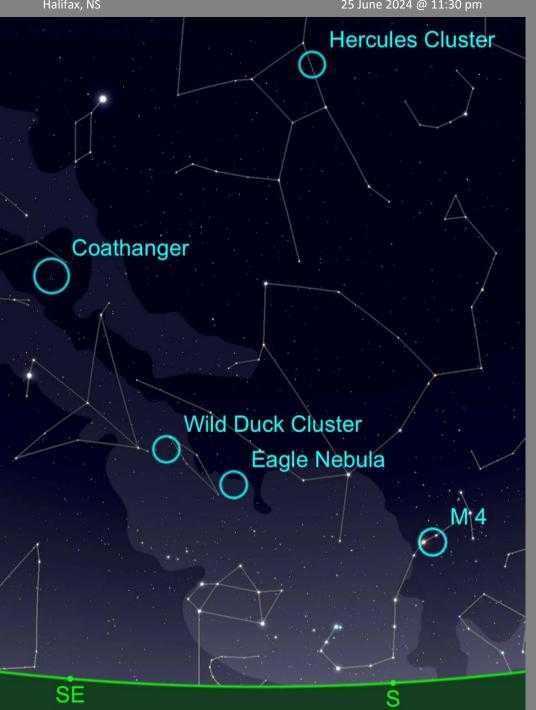
#5 Vega (N)

#12 Altair (N)

#15 Antares (N)

#20 Deneb (N)

- Rasalgethi (A)
  - Algedi
  - Dabih
  - -Nunki (N)
    - Albireo



# Explore the Universe: Summer Deep-Sky

The Coathanger Asterism (Brocchi's Cluster/Collinder 399) 1/3 the way from Altair to Vega

(view in binoculars in dark sky)



# Explore the Universe: Summer Double Stars Omicron 1 Cygni Colorful triple (optical) star o1 Cyg 881 LY distant 30 Cyg 615 LY distant

HD192579 1359 LY distant



## Evening Comet for Telescope Observation/Imaging



Look for Comet C/2023 A3 (mag. 11.6) in Virgo

## Explore the Universe: Artificial Satellites

- the Explore the Universe observing program requires observation of at least 3 Earth-orbiting artificial satellites
- the International Space Station is an easy target for the unaided eye, appearing as a brilliant point of light moving quickly across the night sky
- dates and times for sighting opportunities can be obtained from <u>Spot The</u>
  <u>Station | NASA</u>



photos: David Hoskin



Questions?

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