A night sky with a blue gradient, a bright star, and a comet streak.

What's Up?

October 1-31, 2020

made with the RASC Observer's Handbook and SkySafari®

photo: Dave Chapman

Winter Hexagon and Triangle

Dawn, August 21, 2020

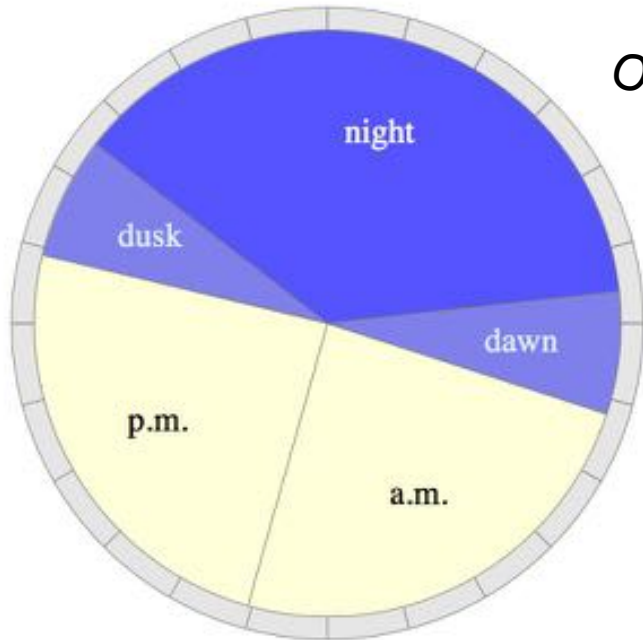


The Sun This Month

Today's Solar Activity

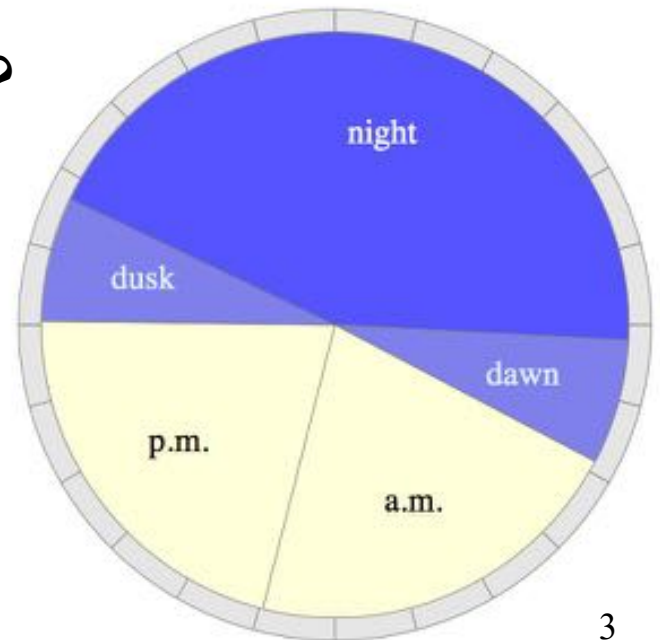
Date	Sunset	Dusk End	Darkness	Dawn Start	Sunrise	“Noon”	Sunlight	Max Altitude
Oct 1	6:53 p.m.	8:30 p.m.	9.1 h	5:35 a.m.	7:12 a.m.	1:03 p.m.	11.7 h	42°
Oct 31	6:03 p.m.	7:42 p.m.	9.0 h	6:12 a.m.	7:51 a.m.	12:57 p.m.	10.2 h	31°

Halifax Oct 01



What happens
on the night of
October 31, 2020?

Halifax Oct 31



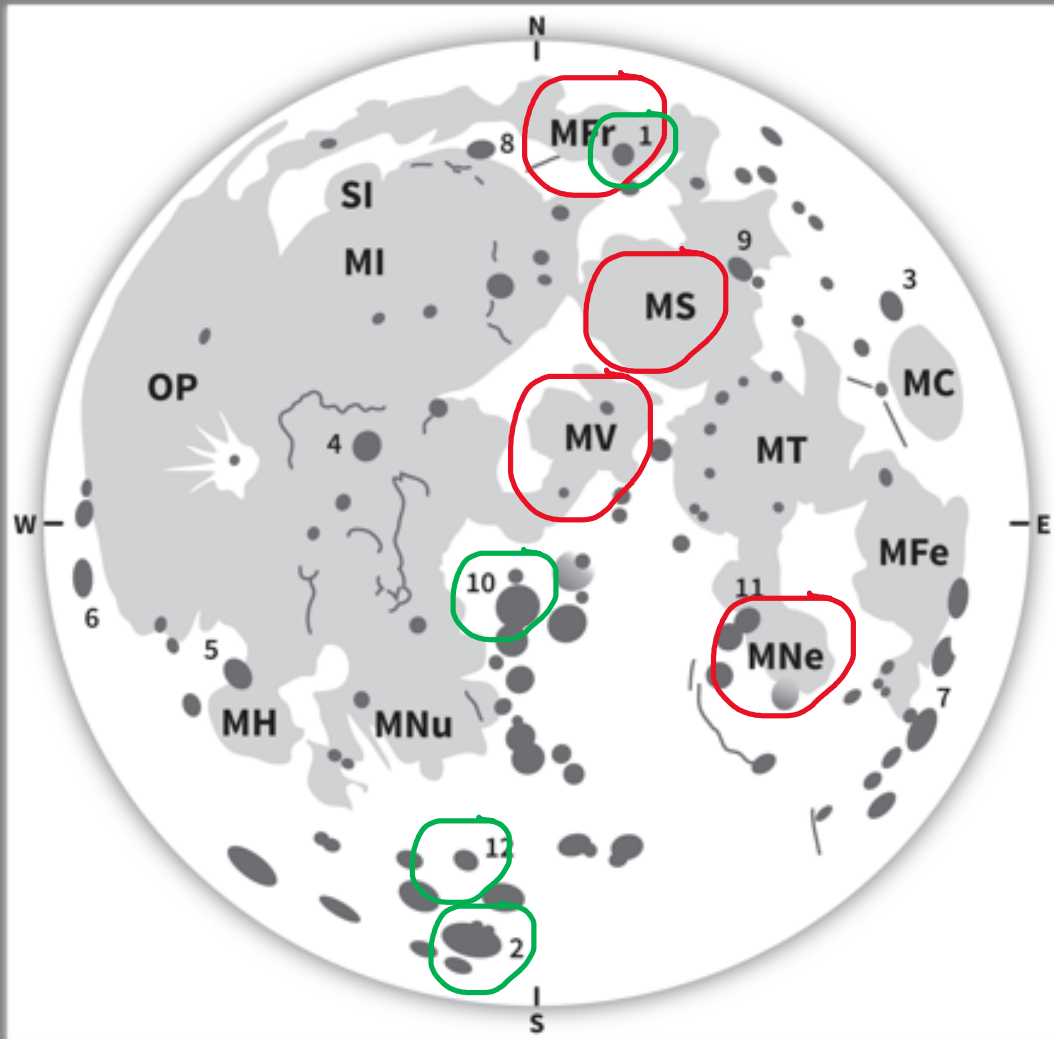
The Moon This Month

Date	Phase	English	Mi'kmaq
Oct 1	<i>Full Moon</i>	Mate Calling	Wikumkewiku's
Oct 2/3	Moon & Mars		
Oct 4	Moon & Uranus (dawn)		
Oct 10	<i>Last Quarter</i> (dawn)		
Oct 16	<i>New Moon</i> + perigee (Large Tides)	Animal Fattening	Wikewiku's
Oct 22	Moon & Jupiter		
Oct 23	<i>First Quarter</i>		
Oct 29	Moon & Mars		
Oct 31	<i>Full Moon</i> (2 nd of month)	Animal Fattening	



[Mi'kmaw Moons @ RASC London Centre](#)

The Moon in *Explore the Universe*



FQ: Oct 22-24

MARE

MFr: Mare Frigoris

MNe: Mare Nectaris

MS: Mare Serenitatis

MV: Mare Vaporum

CRATERS

1. Aristoteles

2. Clavius

10. Ptolomaeus

12. Tycho

challenge

The Planets This Month

Mercury-too close to horizon and Sun

Venus - fairly high & brilliant in the eastern morning sky
- embedded in morning Zodiacal Light after Oct 13
- near Regulus Oct 1-4

Mars - HERE'S MARS!
- mag. -2.5 this month (brighter than Jupiter)
- disk size 22.1" to 22.5" this month
- closest approach on Oct 6 / opposition on Oct 13
- try to observe south polar cap! dark markings

challenge

Jupiter & Saturn

- southwestern evening sky—low in twilight
- close to Moon Oct 22 & 23
- heading towards close conjunction on December 21

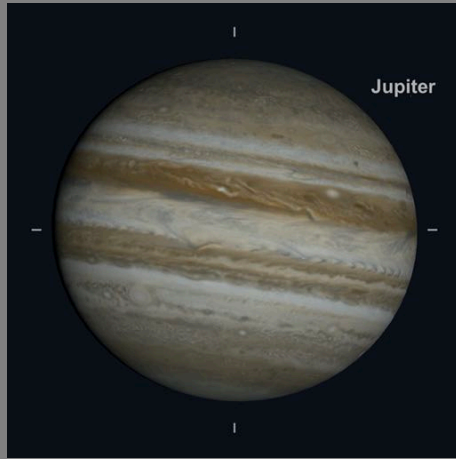
Neptune- in evening sky (mag. 7.8, disk 2.3")

Uranus - Uranus & Moon and opposition October 31 (mag. 5.7, disk 3.7")

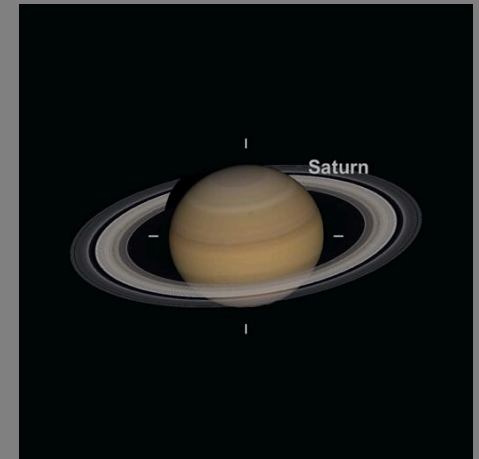
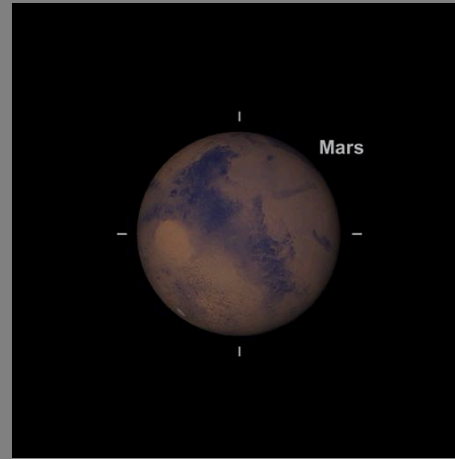
challenge

Here's Mars!

44" (seconds of arc)

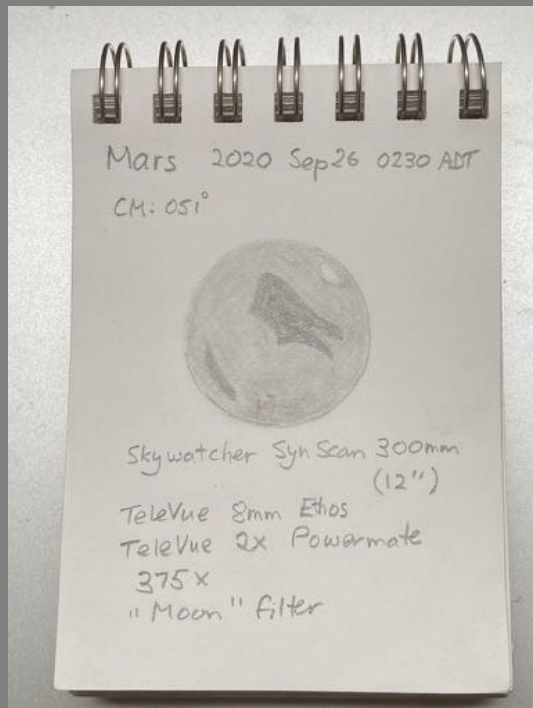


disk 17" rings 39"



Oct. 6 23"
closest approach

Murray Paulson
p. 217 2020 Observer's Handbook



Push your telescope to the max!

- Can you see the south polar cap?
- Can you see any hint of surface markings?

challenge



Moon & Uranus
Oct 6, dawn

Moon & Jupiter
Oct 22, evening



+ Zenith



Orionid Meteor Shower

night of Oct 20/21

observed rates ~15 meteors/h

fast meteors with trains

dusk end 8:00 p.m.

moonset 9:13 p.m.

radiant above horizon 11:00 p.m.

peak at 3:00 a.m. ADT

dawn start 6:00 a.m.

parent comet: 1P/Halley



Explore the Universe:

Autumn Constellations

Pegasus

Andromeda

Cassiopeia

Perseus

Aries





Explore the Universe:

Autumn Stars

Ranking:

#35 Mirfak (N)

Hamal (N)

Alpheratz (N)

Algol

Schedar (N)

Markab

Sheratan

N = Navigation

all good for Syn Scan alignment



Explore the Universe: Autumn Deep-Sky Objects



challenge



Explore the Universe: Autumn & Winter Double Stars

16 Cygni (6.0, 6.2, 40")

Delta Cephei (4.2, 6.1, 41")

Theta1 Tauri (3.4, 3.9, 348")



Questions?



photo: Dave Chapman
(Winter Hexagon and Triangle)