

# Howard Astronomical League



October 15, 2020

# Astro Humor

Orion! There's a package here for you



Oh sweet, my new belt!



Meh, it's not as good as I was expecting



I'll give it three stars



# Welcome New Members and Guests



*International* OBSERVE  
THE **MOON** NIGHT 2020

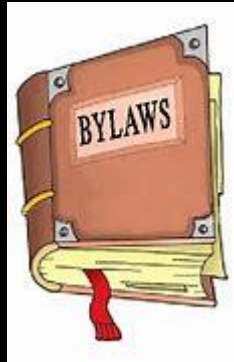


*September*  
**26<sup>TH</sup>**

#ObserveTheMoon

MOON.NASA.GOV/OBSERVE

# HAL Bylaws



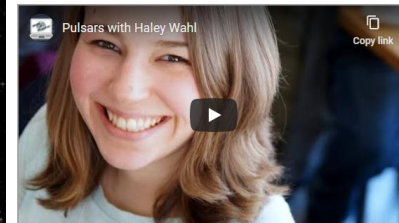
# Guest Presenter

# Haley Wahl

Physics PhD Candidate and  
NASA WV Space Grant Consortium  
Graduate Fellow

# Topic: Pulsars

Pulsars with Haley as  
featured on Skype's "Ask  
a Scientist"



Haley Wahl, a PhD student in Physics at WVU, discusses her area of research, specifically pulsars. She teaches others all about pulsars and what makes them unique.

# HAL APPAREL AND MORE

**H**OWARD  
**A**STRONOMICAL  
**L**EAGUE



HAL Website Search:

ENHANCED BY Google



Alpha Ridge Star Parties Canceled.  
Meetings Virtual Until Further Notice

**HAL Info**

**News/Events**

**For Members**

**Spec. Interests**

**Resources**

**Contact Us**

HAL's October general meeting is coming up on Thursday, the 15th from 7-9PM. This will be a virtual meeting held via ZOOM. All members of the public are invited to attend.

This month's speaker is WVU PhD candidate Haley Wahl discussing Pulsar Polarization. More information about Haley [here](#).

**Join Zoom Meeting - Link Information**

<https://us02web.zoom.us/j/82362260460?pwd=MXBEOVBUIU1kxTlZVVDdIN0NNTGlaQT09>

Passcode: pulsar

Meeting ID: 823 6226 0460

**One tap mobile**

+13017158592,,82362260460#,,,,,0#,,410872# US (Germantown)

**Dial**

+1 301 715 8592 US (Germantown)

Meeting ID: 823 6226 0460

Passcode: 410872

Find your local number: <https://us02web.zoom.us/j/82362260460>

**NOTE:** The parks have now partially re-opened. However, HAL is still not scheduling live members-only or public events. HAL keyholders are free to call members-only **impromptu** observing sessions via the closed hal\_impromptu email list for **Carrs Mill Park** or **Alpha Ridge Park**. There are no restroom facilities available at either location at this time.

Due to COVID-19, the monthly Planning (board of directors) meeting, Astroschool, the HAL public meeting, and various observing events will be held "virtually" using Zoom.

Check back frequently for updates. HAL looks forward to getting back to normal as soon as prudent. We look forward to seeing everyone and again showing members of the public the wonders of the night sky.

# Impromptu Star Parties

Alpha Ridge is open for a keyholder to call an Impromptu with the following provisions:

- 1) HALO will remain closed, except to the keyholder to turn off/on the parking lot and restroom lights and to turn on power to the exterior SE corner of HALO.
- 2) The restrooms will not be unlocked. If they are left unlocked by the County, they are not to be used.
- 3) The keyholder is responsible for closing the gate after entering and keeping lock separately until locking up at the end of the observing session.
- 4) Members will be informed that the gate is being left closed except for entry and exit. Members will be asked to open the gate inwards and close the gate behind them upon arrival and to repeat the routine upon departure.
- 5) Members will be reminded that all social distancing protocols currently called for in Howard County will be in effect.

# HAL OFFICERS

## HAL Officers/Positions 2020

<b>President</b>	Phil Whitebloom	president@howardastro.org
<b>1st Vice President</b>	Victor Sanchez	1stvp@howardastro.org
<b>2nd Vice President</b>	JoAnn Shapiro	2ndvp@howardastro.org
<b>Treasurer</b>	Joel Goodman	hal_treasurer@howardastro.org
<b>Secretary</b>	Cheryl Kerr	secretary@howardastro.org
<b>Event Coordinator</b>	David Stein	events@howardastro.org
<b>Publicity Chair +</b>	Joel Goodman	halpublicity@howardastro.org
<b>Observatory Director *</b>	Joel Goodman	observatory@howardastro.org
<b>Librarian +</b>	Bob Dutilly	librarian@howardastro.org
<b>ALCor +</b>	Steve Jaworiwsky	halcor@howardastro.org
<b>Webmaster *</b>	Chas Rimpo	Use "Contact Us" Page

\* Appointed as voting officers of the board of directors by President with board approval

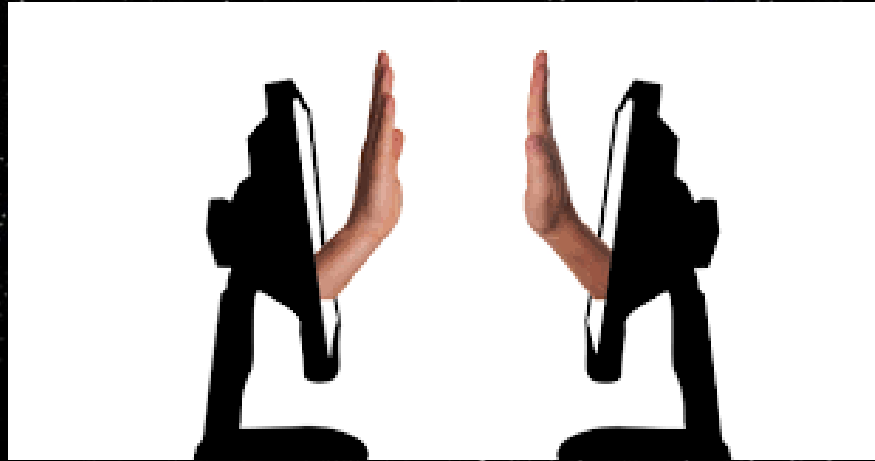
+ Appointed non-voting member of the board except when position filled by an elected officer

# Membership

Our Membership in HAL has grown by at least 35 new members this month. Our FaceBook membership is also growing as well as our Impromptu list.

# HAL Virtual

## What's Been Happening?



# Astro-School Virtual

## Lunar Features



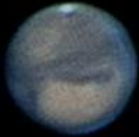
*More than Simple Craters*

# HAL Members Astro Art

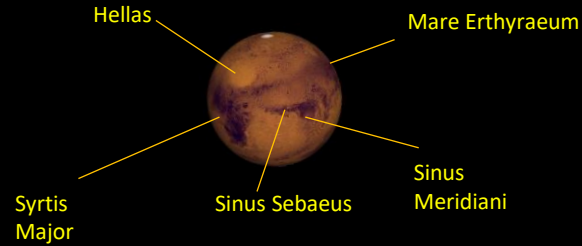




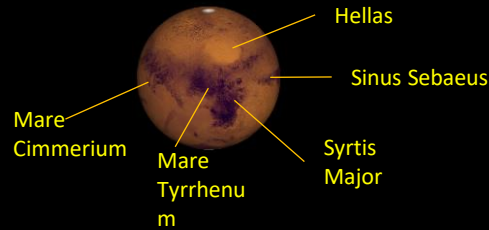
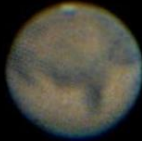
2020-10-06 06:01 UT  
 CM 330° Alt: 56°  
 Seeing 6/10



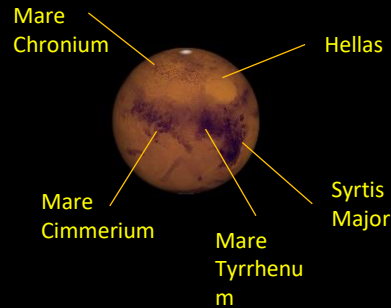
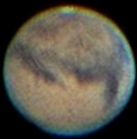
## WINJUPOS



2020-10-07 03:00 UT  
 CM 277° Alt: 42°  
 Seeing 5/10



2020-10-09 02:29 UT  
 CM 252° Alt: 38°  
 Seeing 7/10



### Details

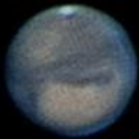
- ✓ 15cm (6") f/8 Newtonian
- ✓ Televue Powermate 2.5x Barlow
- ✓ DFK21AU042 camera, FireCapture
- ✓ Baader UV-IR cut filter
- ✓ Processed with PPIP, Autostakkert!3, Movavi

- Hellas seems darker and more subdued than normal (usually so bright it can be mistaken as polar cap).
- Mare Chronium likewise is darker than expected.
- SPC is shrinking rapidly now (Ls 291°) as we are past Southern Summer (Ls 270°)

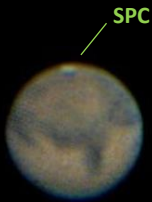
*Jim Tomney*



2020-10-06 06:01 UT  
 CM 330° Alt: 56°  
 Seeing 6/10

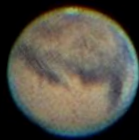


2020-10-07 03:00 UT  
 CM 277° Alt: 42°  
 Seeing 5/10

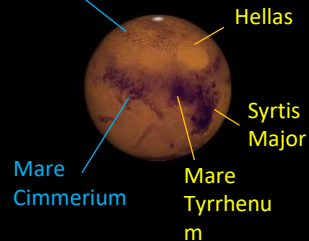
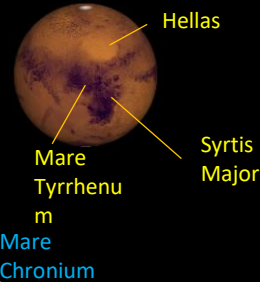
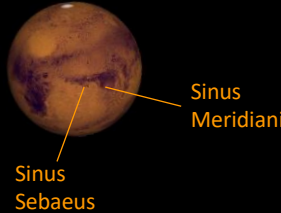


ALPO Gallery  
 2018 Opposition

2020-10-09 02:29 UT  
 CM 252° Alt: 38°  
 Seeing 7/10



## WINJUPOS



## Capture Details

- ✓ 15cm (6") f/8 Newtonian
- ✓ Televue Powermate 2.5x Barlow
- ✓ DFK21AU042 camera, FireCapture
- ✓ Baader UV-IR cut filter
- ✓ Processed with PPIP, Autostakkert!3, Movavi

## Features

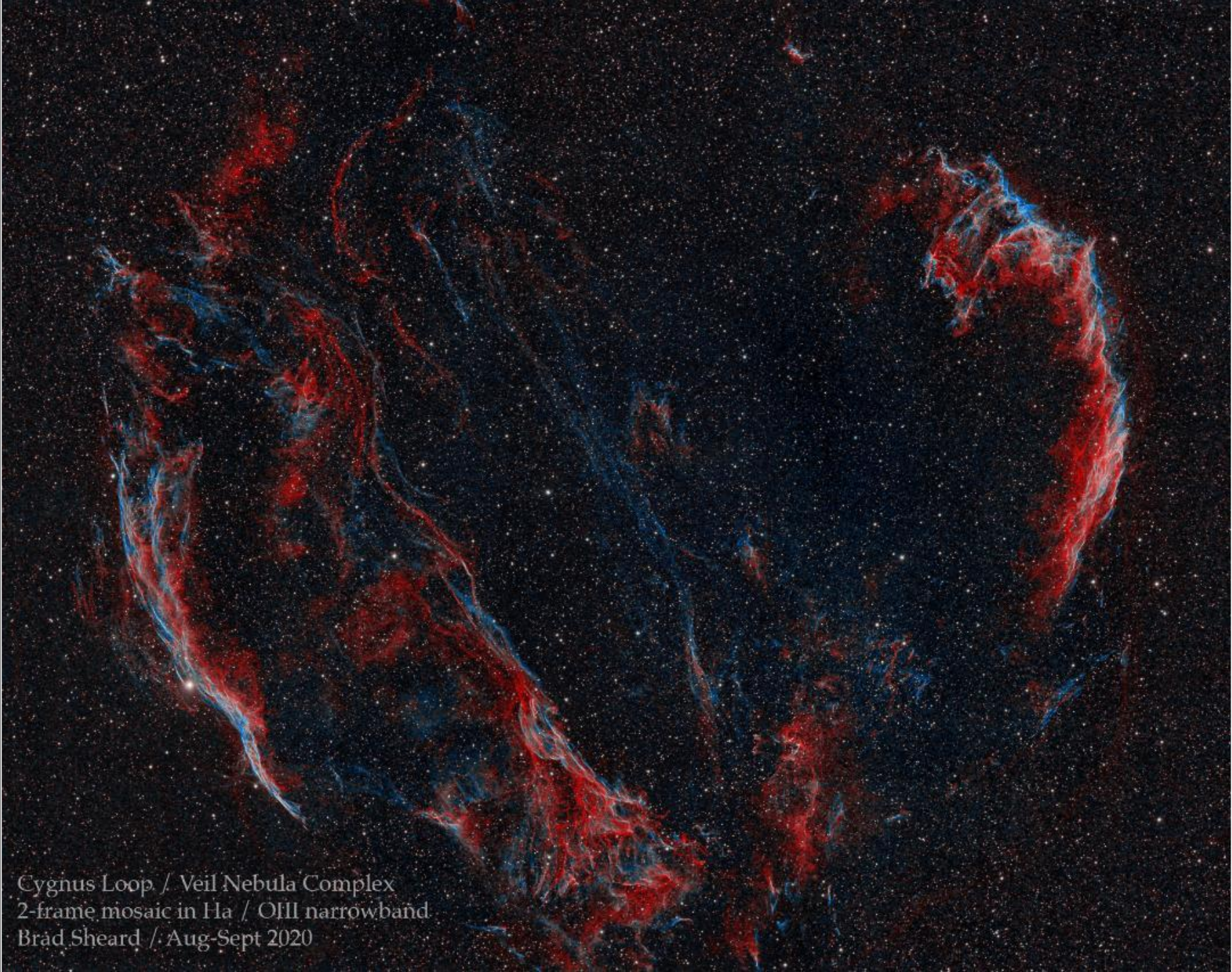
- Sinus Sebaeus & Sinus Meridiani
- Syrtis Major, Mare Tyrrhenum, & Hellas
  - Hellas appears muted & dusky – normally bright feature
- Mare Cimmerium and Mare Chronium
  - Mare Chronium also appears dusky
- SPC is shrinking rapidly now (Ls 291°) as we are past Southern Summer (Ls 270°)

*Jim Jomney*

Southeast Cepheus  
10-frame mosaic in H $\alpha$   
Brad Sheard / Aug-Sept 2020







Cygnus Loop / Veil Nebula Complex  
2-frame mosaic in H $\alpha$  / OIII narrowband  
Brad Sheard / Aug-Sept 2020



© Steve Rifkin, 2020

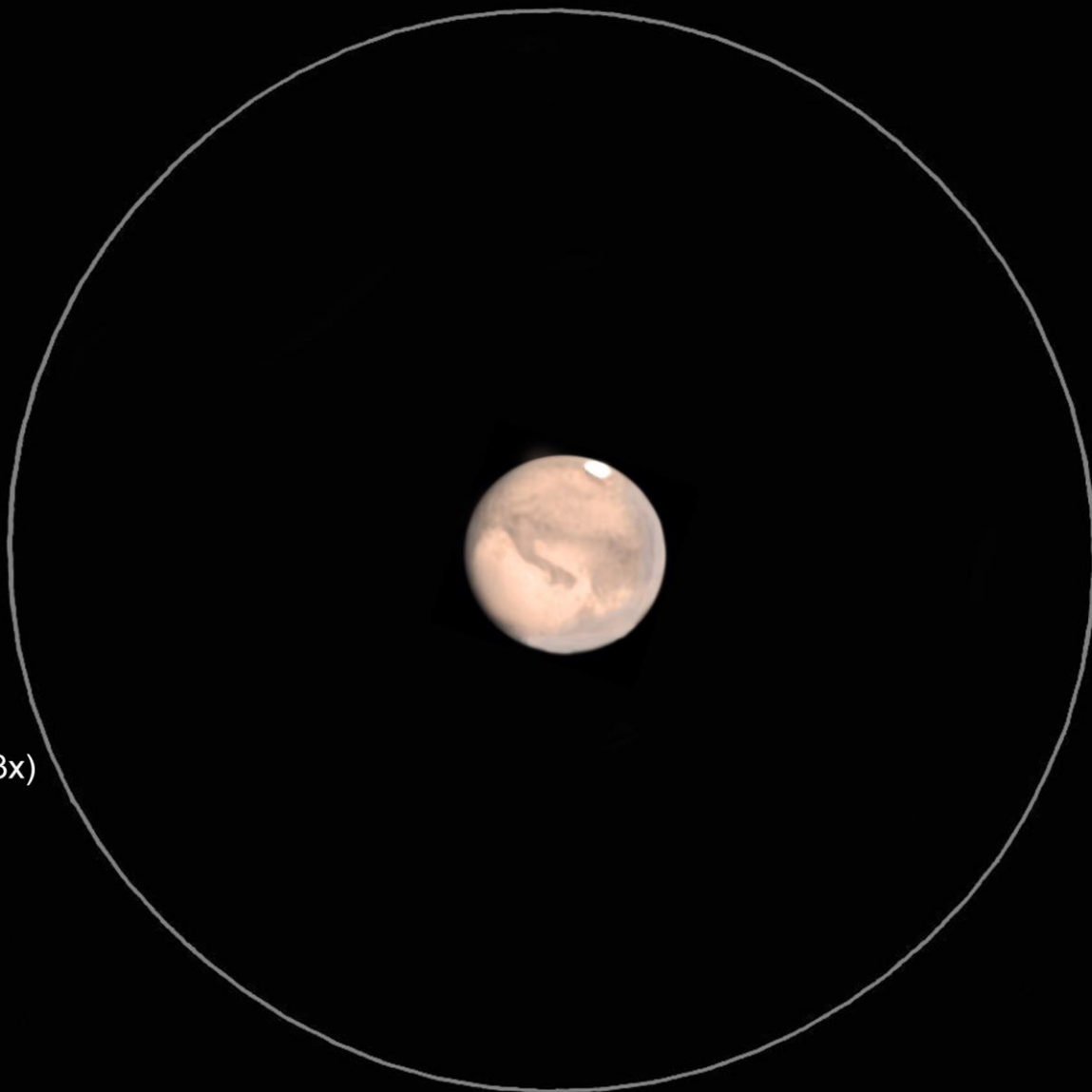
# MARS

Date: 3-October-2020  
Time: 1:35 to 02:40 EDT  
Constellation: Pisces

Magnitude: -2.52  
Distance: 39,041,439 miles  
Size: 22.5 arcseconds  
Phase: 99%  
CM: 356 degrees (02:00 EDT)

Telescope: 155mm Refractor  
Eyepiece: 4.5mm Delos w/barlow (413x)  
Filters: Telvue Mars B, Red #25  
Blue #80A, Green #58  
Orientation: Inverted Image (South-Up)

Location: Deck of House  
Drawing by: Richard Orr



# NGC 6633

Open Cluster

Constellation: Ophiuchus

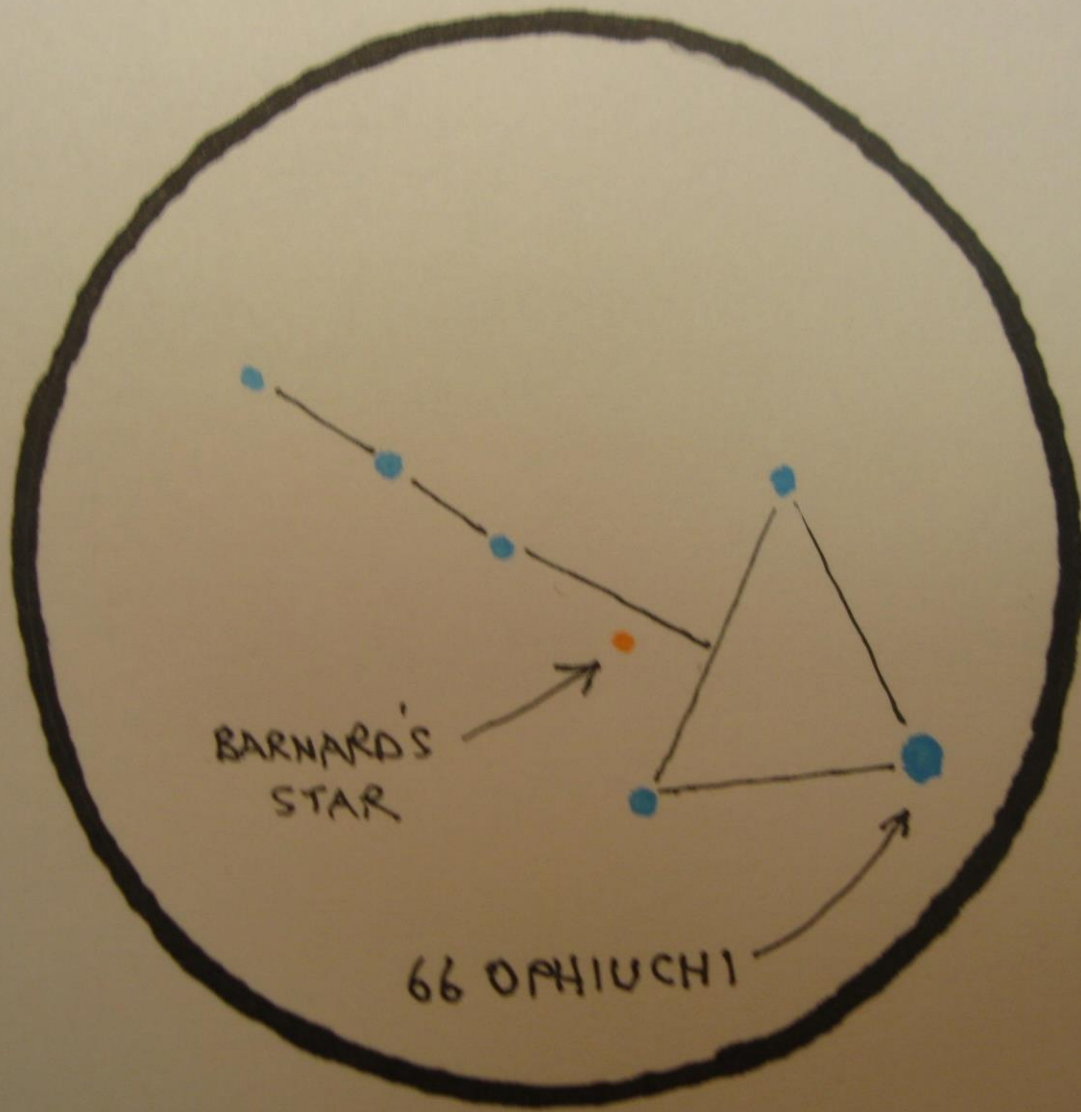
Magnitude: 4.3  
Distance: 1,000 light years  
Size: 20.0 arcminutes  
Age: 600 million years old  
Stars: 159+

Telescope: 110mm Refractor  
Eyepiece: 31mm Nagler (25x)  
Field of View: 3.13 degrees  
Orientation: Diagonal View

Date: 06-October-2020  
Time: 19:45 to 20:40 EDT  
Location: Carrs Mill Park  
Drawing by: Richard Orr









*M27  
September 19, 2020  
Alpha Ridge Park*

*8-in RC  
LRGB (27,9,9,9)x4min  
3h36m Total*

*ASI1600MM-C  
Max Dynamic Range  
Wayne Baggett*



*Mirach's Ghost*                      8-in RC                      ASI1600MM-C  
*September 19-20, 2020*           Lum, 27x4min           Max Dynamic Range  
*Apha Ridge Park*                      1h48m Total           Wayne Baggett



*M57  
Summer 2020  
Alpha Ridge Park*

*8-in RC  
LRGB (45,15,15,15)x4m  
6h Total*

*ASI1600MM-C  
Max Dynamic Range  
Wayne Baggett*



*Cygnus Nebulosity - 5.1 Hrs HaRGB - 8" f/4 - 8300*

Gene Handler



*M27 Dumbbell Nebula - 6.4 Hrs Ha OIII RGB - 8" f/4 - 8300*

Gene Handler



Ian Slepian



Ian Slepian



**Kurt Bauch**

shared a photo with you!





Andromeda Galaxy by Jim Lane

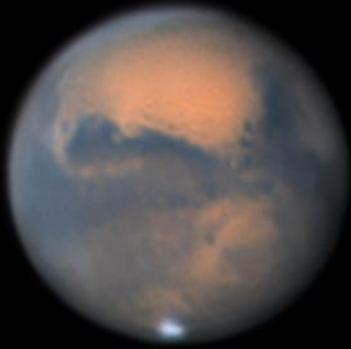
35 seconds

480 images

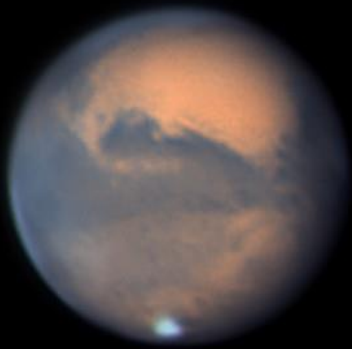
5 sec exposures taken every 30 seconds

JPG\_movie\_r3\_AndromedaGalaxy-1m28s\_Severn\_M  
D\_2020-09-20.mp4

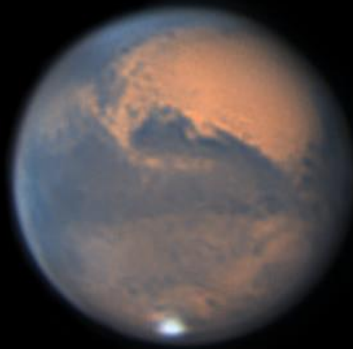




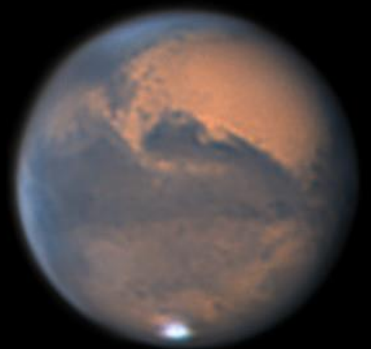
0436UT



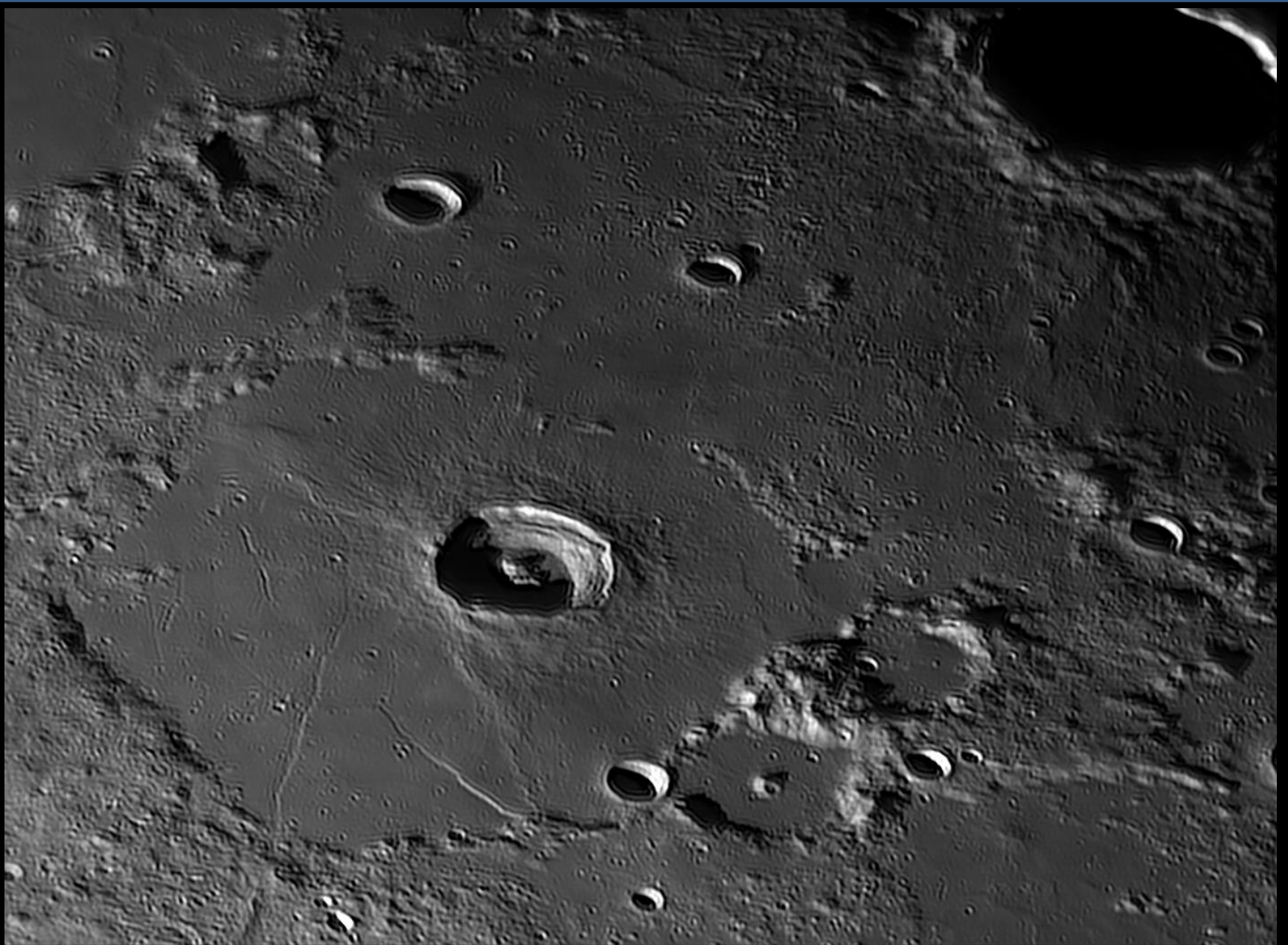
0530UT



0609UT



0625UT



Burg & Hercules

October 6th 2020

**Next Month**

**Monthly Meeting: Nov. 19th**

**Speaker: Sayali Sudhir Avachat**

**Topic: AGN (Active Galactic Nucleus)**

Thank To All of You

Stay Healthy

Stay Safe

Clear Skies