



Howard Astronomical League Monthly Meeting

January 16th, 2025



25
years

25 Years !!!

Founding members – Dana Gelabert-Boltersdorf, Michael Hall, ZoAnn Lapinsky Macon, Mary Kay Sigaty, and Malcolm Willette formed the Howard Astronomical League as non-profit corporation on December 5, 1999.

Tonight's Agenda, January 16th, 2025

- ⇒ • Introductions
- Club Business
 - 2024 Financial Report – Jim Tomney (for Joel Goodman)
 - 2025 Board Election – Wayne Baggett
- Announcements
 - 2025 Schedule of Star Parties
 - New HAL Website is Coming
- Featured Speaker – Dr. Ravi Sankrit, Associate Scientist, Instruments Div., STScI
- What's Out in the Sky This Month...
 - What's up In Space – Wayne Baggett
- Members' Astro-Images and Sketches
- Wrap-up & Discussion



Treasurer's Report as of 31 December 2023

31 December 2024 M&T Bank Balance

Total
\$12,164.81

31 December 2023 M&T Bank Balance

\$9,316.61

HAL Membership Statistics

Statistics as of Monday, January 1, 2024 1:52 PM

Category	Members	Memberships
Currently Paid-Up	385	303
New Members in Last 30 Days	8	6
Last 30 Days - Renewed	15	11
Last 30 Days-Did Not Renew	11	10
Net Gain - Last 30 Days	-3	-4
Renewals Due Next 30 Days	25	21
Annual Turnover	26.2%	
Annual Membership Turnover	27.7%	
Impromptu List Members	180	

Percent Individual vs Family Memberships

Individual Memberships	Family Memberships
54.8%	45.2%

Percent Individual vs Family Members

Individual Members	Family Members
44.4%	55.6%

HAL Membership Statistics

Statistics as of Tuesday, December 31, 2024 10:14 AM

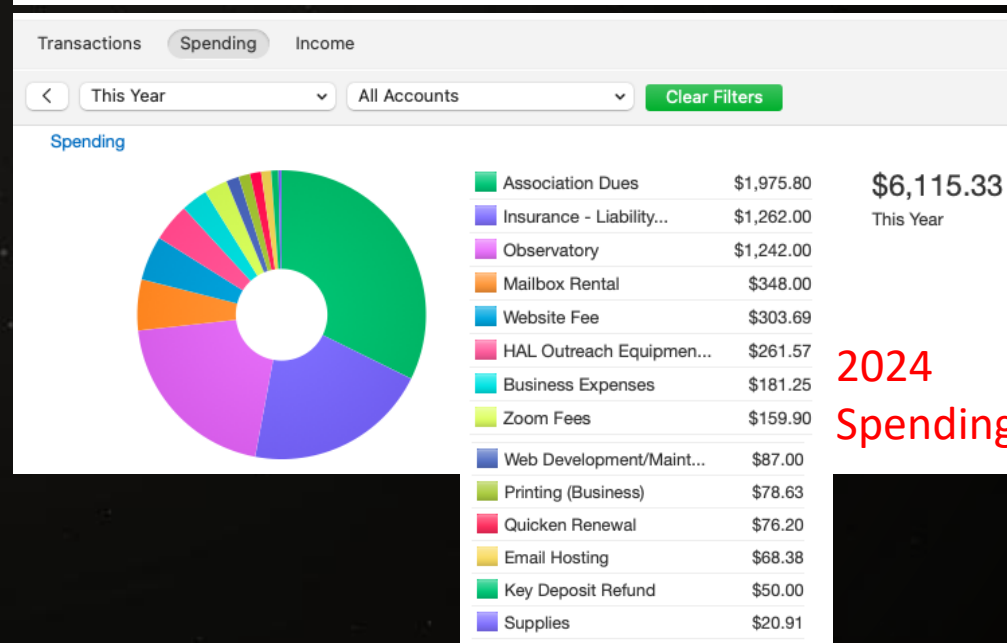
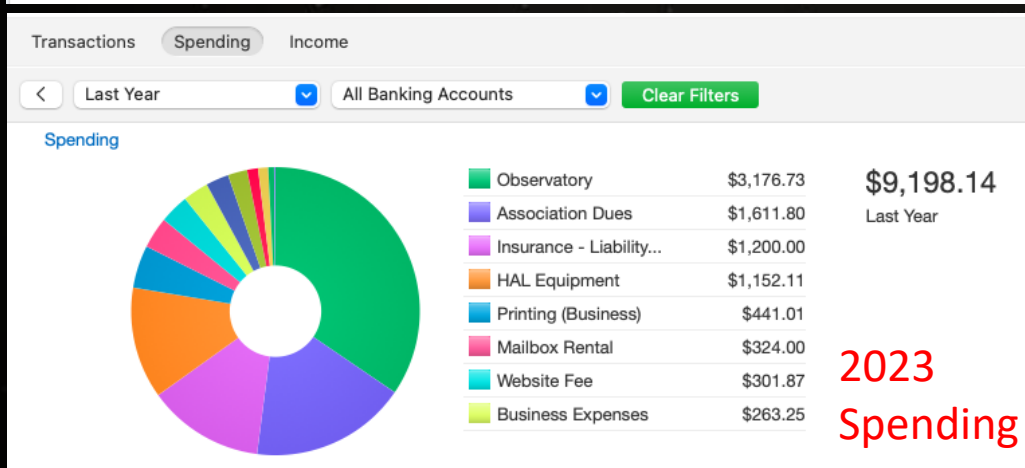
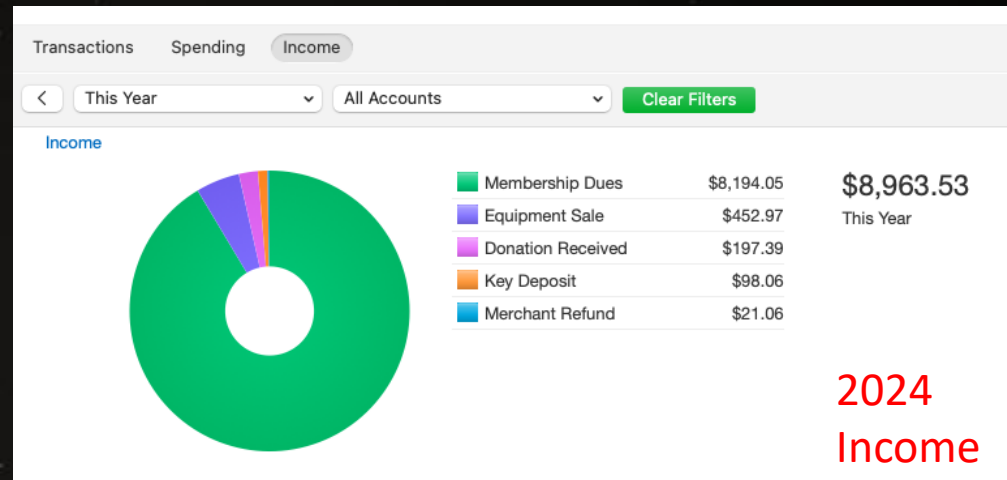
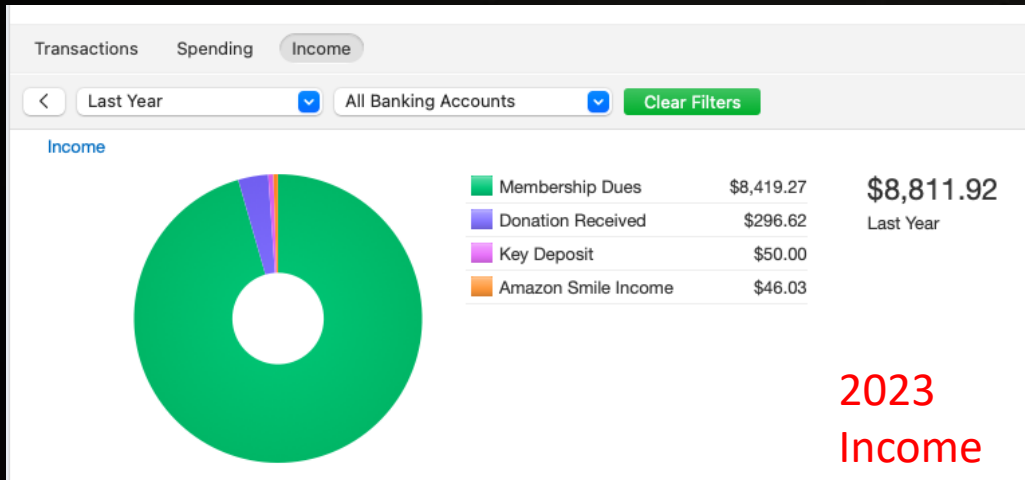
Category	Members	Memberships
Currently Paid-Up	401	327
New Members in Last 30 Days	9	7
Last 30 Days - Renewed	19	13
Last 30 Days-Did Not Renew	12	10
Net Gain - Last 30 Days	-3	-3
Renewals Due Next 30 Days	13	11
Annual Turnover	32.7%	
Annual Membership Turnover	29.7%	
Impromptu List Members	189	

Percent Individual vs Family Memberships

Individual Memberships	Family Memberships
53.3%	46.7%

Percent Individual vs Family Members

Individual Members	Family Members
44.4%	55.6%



- Major Purchases in 2024
 - \$1144 - new flat screen for HALO
- Major Purchases in 2023
 - \$2750 – new computer for HALO
 - \$325 – portable hard drive & docking station
 - \$530 – SeeStar digital telescope
 - \$625 – iPad & accessories for SeeStar S50

HAL 2025 Elections

HAL Leaders

Phrases often heard this time of year

It's your club, help make it what you want it to be

and

HAL doesn't run itself

HAL Leaders

- On the first sentiment, can help by
 - Running for elected office
 - Offering to assist with HAL-efforts in outreach or in-house projects
 - Becoming a Keyholder, CTA, or CTO
 - Suggesting speakers for our meetings
 - Submitting suggestions to the Board for activities or club improvements
- The second sentiment depends on members tackling the first

Let's recognize the people who "led" HAL in 2024

HAL Leaders – 2024

- Start with 2024's Election Committee – Jim Johnson
- The 2024 Elected Board Members
 - Victor Sanchez, President
 - Jim Tomney, First Vice President
 - Grace Coventry, Second Vice President
 - Joel Goodman, Treasurer
 - Dana Porter, Secretary
 - David Stein, Events Coordinator

HAL Leaders – 2024

- The 2024 Appointed Board Members
 - Victor Sanchez, Observatory Director
 - Ken Sall, Webmaster
 - Hannah Broder, Publicity Chair and Social Media Coordinator (Facebook, Instagram)
 - Steve Jaworiwsky, AL Coordinator
 - Krystal Rolon, Librarian
- There are others who help in executing the plans put out by the Board
 - Jared Case, Discord Channel Administrator
 - Web Development Team: Sateesh Nalliyappan, Stephen Pribut, Victor Sanchez

HAL Leaders – 2024

- Certified Telescope Operators

Wayne Baggett

Hannah Broder

Ken Everhart

Neville Fernandes

Dale Ghent

Cheryl Kerr

Richard Ren

Krystal Rolon

Victor Sanchez

David Stein

- Keyholders (all CTOs plus the following)

Jared Case

Joel Goodman

Mike Krauss

Chris Miskiewicz

Chris Todd

Jose Urias

Phil Whitebloom

Finally, all of the members who participated in HAL's activities in 2024!

HAL Elections – 2025

- The HAL Bylaws state
 - Officers shall be elected by ballot at the annual membership meeting in the month of January. The results are decided by a simple majority. However, if there is but one nominee for the office, election for that office may be by voice vote. If there is but one nominee for each position, a single voice vote may be held for the entire candidate slate.
- Because we have only a single candidate for each position, we will use a “voice vote” for the entire slate
 - Vote by raising hands
 - On Zoom, use the “Raise Hand” reaction 🙋
 - We will ask for “those opposed” to the slate first, since they should be easier to count 😊

HAL Elections – 2025

- The 2025 Board Members election slate:
 - Victor Sanchez, President
 - Jim Tomney, First Vice President
 - Grace Coventry, Second Vice President
 - Joel Goodman, Treasurer
 - Richard Taibi, Secretary
 - David Stein, Events Coordinator

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HAL Star Parties...

2025 Schedule of Star Parties

March

March 8 - Public

March 29 - Members

April

April 5 - Public (Jupiter/Europa shadow transit)

April 26 - Members

May

May 3 - Public

May 24 - Members

June

June 7 - Public

June 21 - Members

July

July 5 - Public (Mercury near greatest eastern elongation)

July 26 - Members

August

August 2 - Public

August 23 - Members

September

September 13 - Public (No moon)

September 20 - Members (Saturn at opposition)

October

October 4 - Public (International Observe the Moon Night, Moon 93.7% full)

October 18 - Members

November

November 1 - Public

November 15 - Members

Recent Events

Brrr... It's been a bit cold recently, but please keep your eyes open for Impromptu Star Party Announcements!



Regional Star Party info...

<https://skyandtelescope.org/astronomy-resources/annual-stargazing-events/>



Howard Astronomical League



About HAL

Activities

Observing

Imaging

Membership

Resources

Join HAL

HALO



Howard Astronomical League Observatory

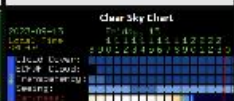
Affiliations



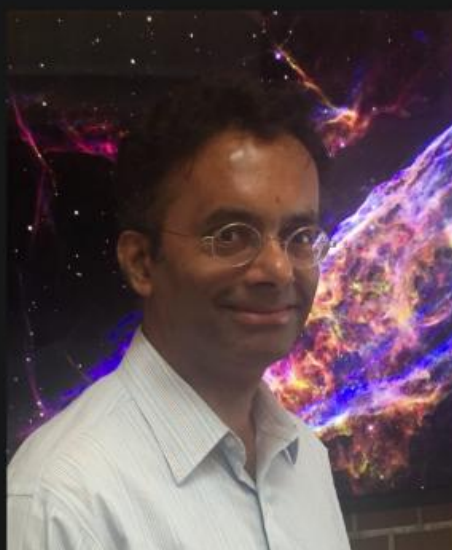
Astronomical League



DarkSky



Featured Items / News



Multi-Epoch HST Imaging of a Shock Front in the Cygnus Loop Supernova Remnant – January 16th, 2025

Presenter: Dr. Ravi Sankrit, Associate Scientist, Instruments Division, STScI (And Annual Meeting Elections) Quick Zoom Link
The meeting will take place at 7 PM at the Robinson Nature Center Abstract:

Read More

Member Login

Upcoming Events

JANUARY, 2025



16 JAN Important: Attend Jan 16 Annual Meeting for Elections!

We Need You - to attend our Jan. 16th General Meeting (in person or via Zoom) to vote for HAL officers. Better yet, consider running for a HAL leadership position.

16 JAN Multi-epoch HST imaging of a shock front in the Cygnus Loop supernova remnant

Presenter: Dr. Ravi Sankrit, Associate Scientist, Instruments Division, STScI



Howard Astronomical League



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HAL Mission

HALO Observatory

Club History

HAL Current Officers

Join HAL

HALO

Activities

Monthly Meetings

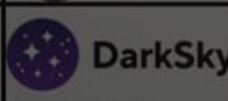
Monthly Planning Meetings

Star Parties

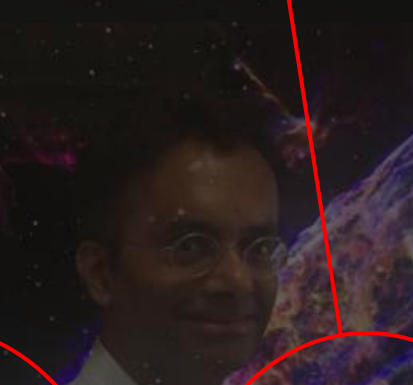
HAL Calendar

Past Meetings

Affiliations



Featured Items / News



Member Login

Upcoming Events

Membership

Login

Join HAL

Support HAL

HAL Documents

AL Awardees

HAL Store

Resources

Join E-Mail List

Club Equipment

HAL Library

Solar System Walk

Astronomy Links

Contact Us / Help

Observing

Club Viewing Sites

Star Party Reports

Sky Charts

Sky Conditions

Imaging

Members Astrophotos

Object of the Month

Discord Group

Astrophotography Links

Presenter: Dr. Ravi Sankrit, Associate Scientist, Instruments Division, STScI (And Annual Meeting Elections) Quick Zoom Link

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Read More

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Topic: Multi-Epoch HST Imaging of a Shock Front in the Cygnus Loop Supernova Remnant

Dr. Ravi Sankrit, Associate Scientist, Instruments Division, STScI

Ravi Sankrit obtained his PhD from Arizona State University, working on some of the early narrowband images obtained with HST/WFPC2, including those of the Crab Nebula and the Eagle Nebula (the original “Pillars of Creation” image).

He then moved to the Johns Hopkins University as a post-doctoral fellow and stayed on for several years as part of the Far-Ultraviolet Spectroscopic Explorer (FUSE) science team. After FUSE, Ravi moved across the country to work at the Space Sciences Laboratory (UC Berkeley) and then at the SOFIA Science Center in Moffett Field, California.

He came back to Baltimore in 2017 and has since been an Instrument Scientist on the Cosmic Origins Spectrograph (COS) team. He studies emission line nebulae – from the compact regions around symbiotic stars to large-scale superbubbles, with a particular focus on supernova remnants.

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What's Up in Space: Roman Space Telescope Status

- The Roman Space Telescope (RST) is the next flagship observatory to be launched by NASA
 - Infrared mission with a field of view 100x Hubble's IR instrument (WFC3) with Hubble's resolution
 - Will address problems with dark energy, exoplanets, and other areas of IR astrophysics
 - Expected to image >1 billion galaxies, and find ~2600 new exoplanets via a microlensing survey of the inner Milky Way
 - Consists of a 2.4m primary mirror with two science instruments
 - Wide-Field Instrument (WFI)
 - Coronagraph Instrument (CGI)
 - Launch to Sun-Earth L2 is no later than May 2027
 - Five-year primary mission with five-year extension



Image source, L3Harris:
<https://www.l3harris.com/all-capabilities/nancy-grace-roman-space-telescope>

What's Up in Space: Roman Space Telescope Status

- WFI is a 300-megapixel camera
 - 18 detectors, 4k x 4k pixels each
 - Wavelength coverage 0.48 – 2.3 μm with eight filters and two dispersing elements
 - Will reach 28th mag in 1 hour at 0.62 μm
 - Stellar images range from 0.058 arcsec at 0.62 μm wavelength to 0.169 arcsec at 2.13 μm

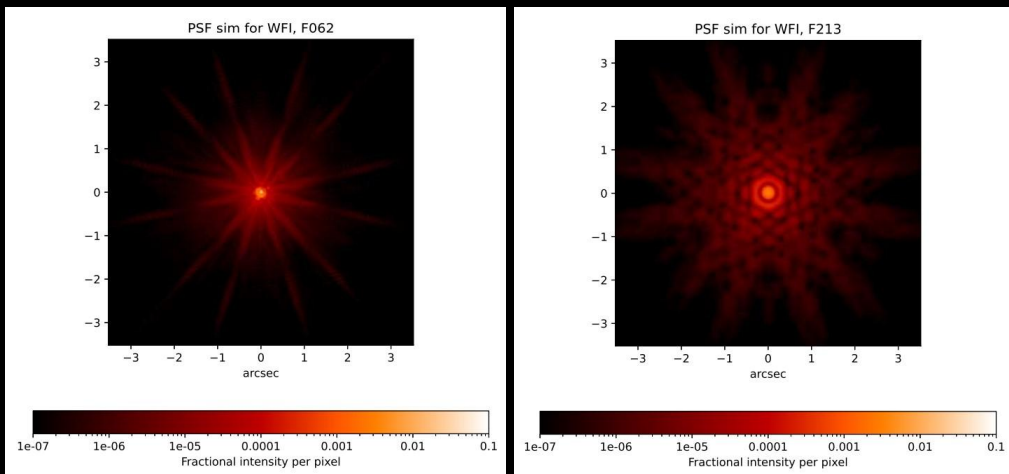


Image credits: By NASA's Goddard Space Flight Center:
https://roman.gsfc.nasa.gov/science/WFI_technical.html#filters

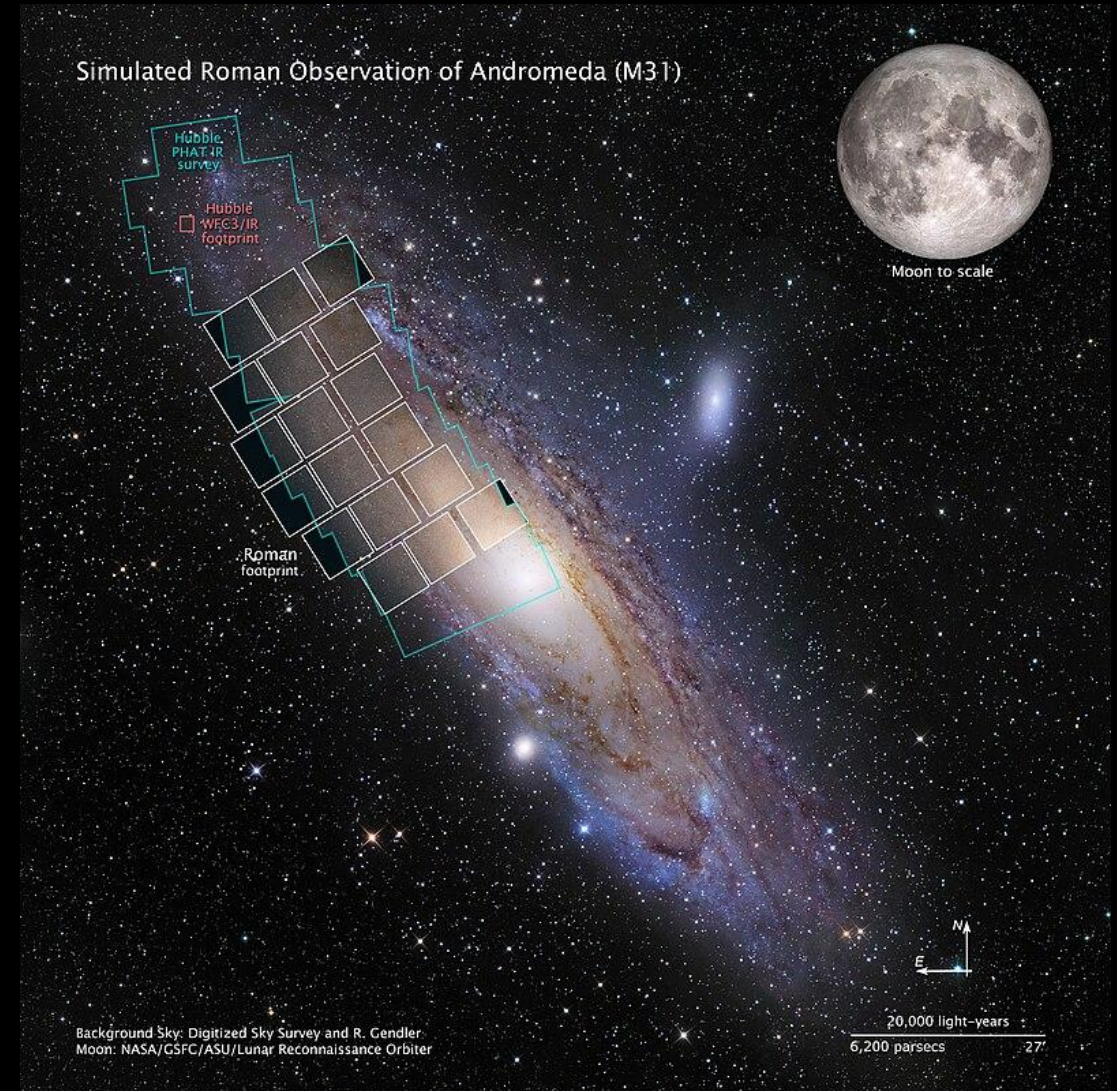


Image credit: By NASA's Goddard Space Flight Center Producer Scott Wiessinger (KBRwyle) [Lead] Narrator Scott Wiessinger (KBRwyle) - <https://svs.gsfc.nasa.gov/13497>, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=132387628>

What's Up in Space: Roman Space Telescope Status

- Status

- Both instruments, the spacecraft bus, the telescope assembly (OTA), and solar arrays are at Goddard Space Flight Center in Greenbelt, Maryland
- Mechanical integration of these assemblies has been completed
- Electrical integration will continue through January 2025

- Future

- System-level testing will start when integration is complete
 - Aliveness and functional tests (many executions!)
 - Vibration and acoustic tests
 - Electromagnetic interference testing
 - Thermal Vacuum tests
 - Optical tube and solar panels will be added in the Fall of 2025

What's Up in Space: Roman Space Telescope Status

Spacecraft Bus

Optical Telescope Assembly

Wide-Field Instrument

Instrument Carrier (with Coronagraph Instrument)



Photo by Dave Hickey

What's Up in Space: Roman Space Telescope Status

Mechanical integration complete!

Optical Telescope Assembly

Instrument Carrier
(with both instruments)

Spacecraft Bus

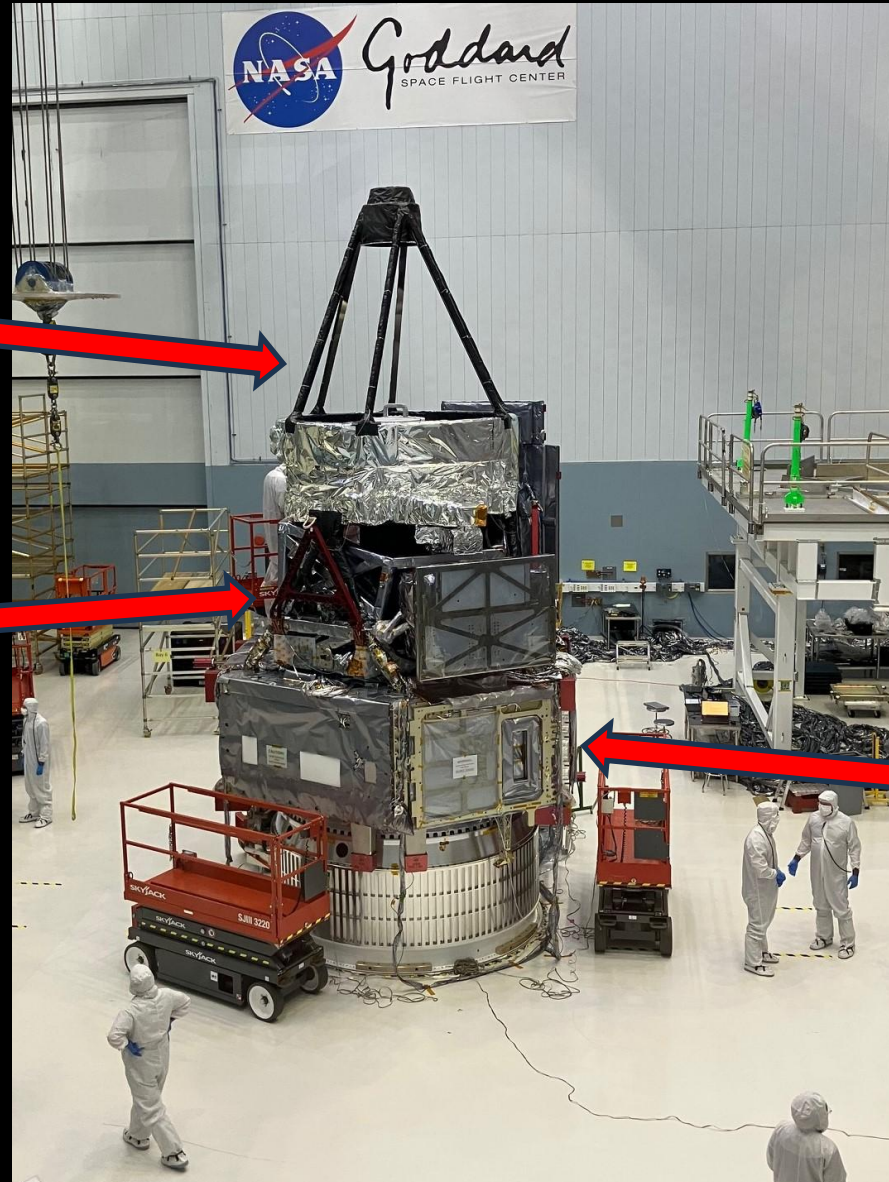


Photo by Dave Hickey

What's Up in Space: Roman Space Telescope Status

- Resources

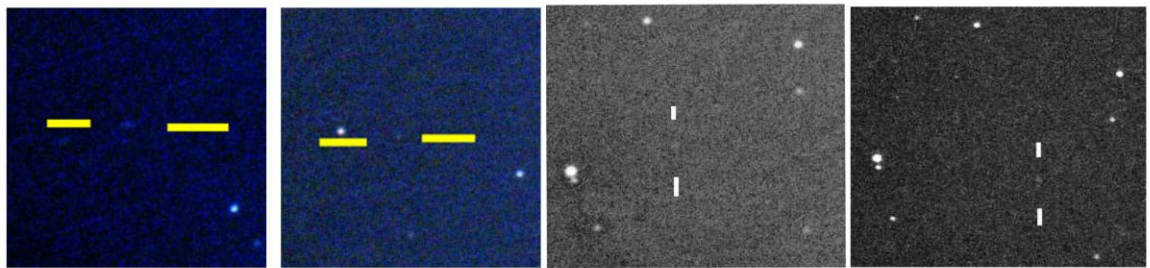
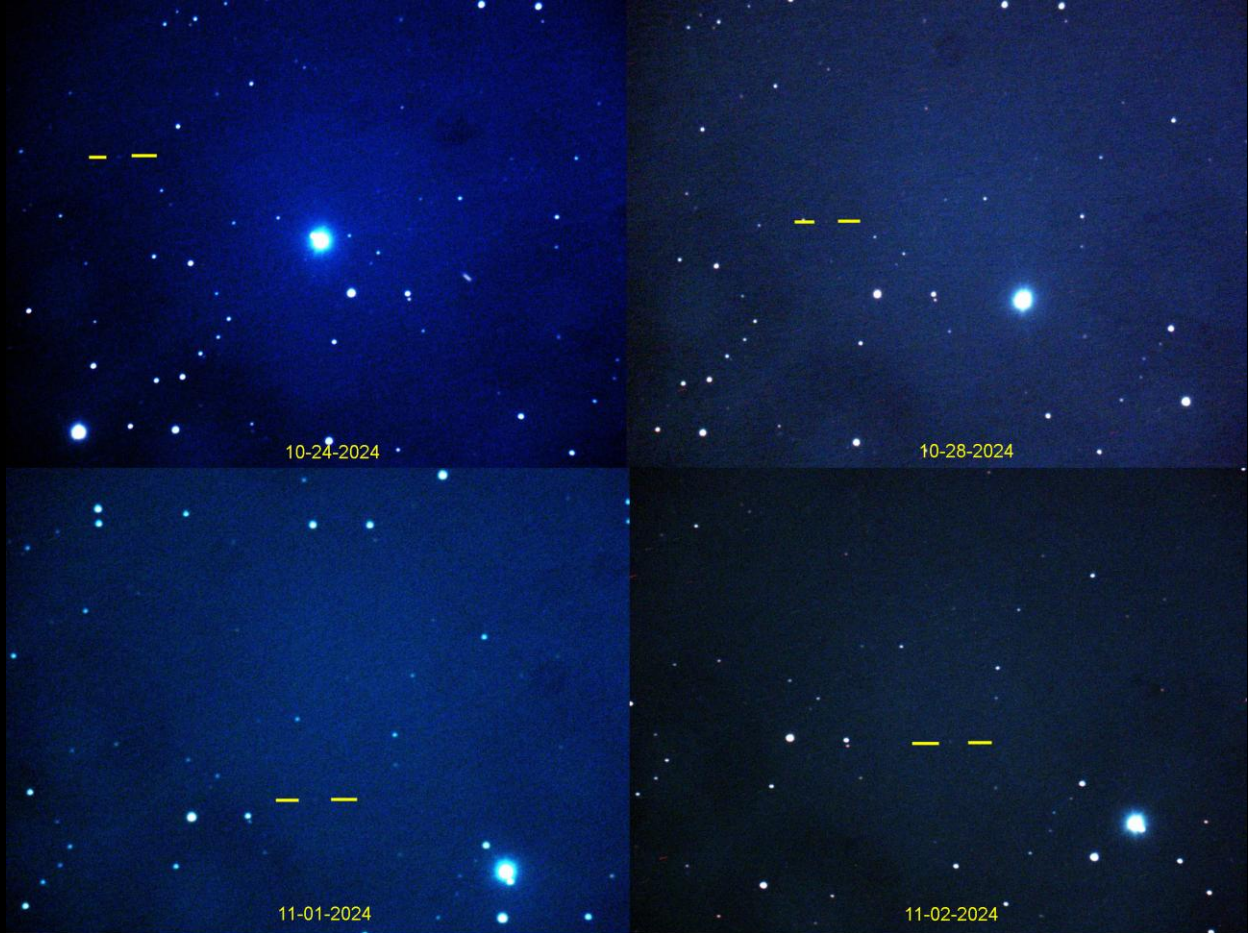
- “Roman Space Telescope reaches assembly milestone,” SpaceNews, Nov. 12, 2024, <https://spacenews.com/roman-space-telescope-reaches-assembly-milestone/>
- <https://www.nasa.gov/universe/nasa-joins-telescope-instruments-to-roman-spacecraft/>, NASA, Jan. 8, 2025
- NASA Goddard Space Flight Center mission website: <https://roman.gsfc.nasa.gov/>
- Space Telescope Science Institute mission website: <https://www.stsci.edu/roman>
- Jet Propulsion Laboratory Coronagraph Instrument website: <https://www.jpl.nasa.gov/missions/the-roman-coronagraph-instrument/>

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2024-11-08 Jupiter, Io and the Red Spot from 2200 to 2400



10-24

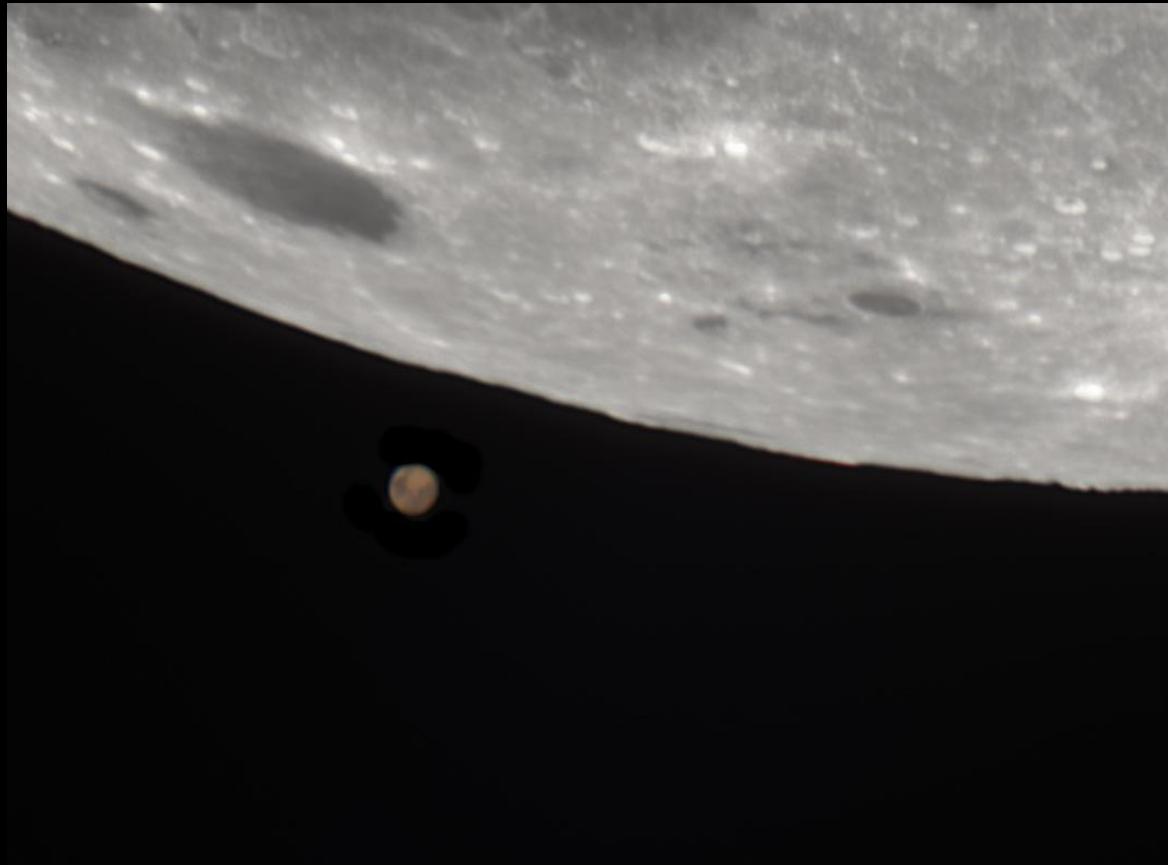
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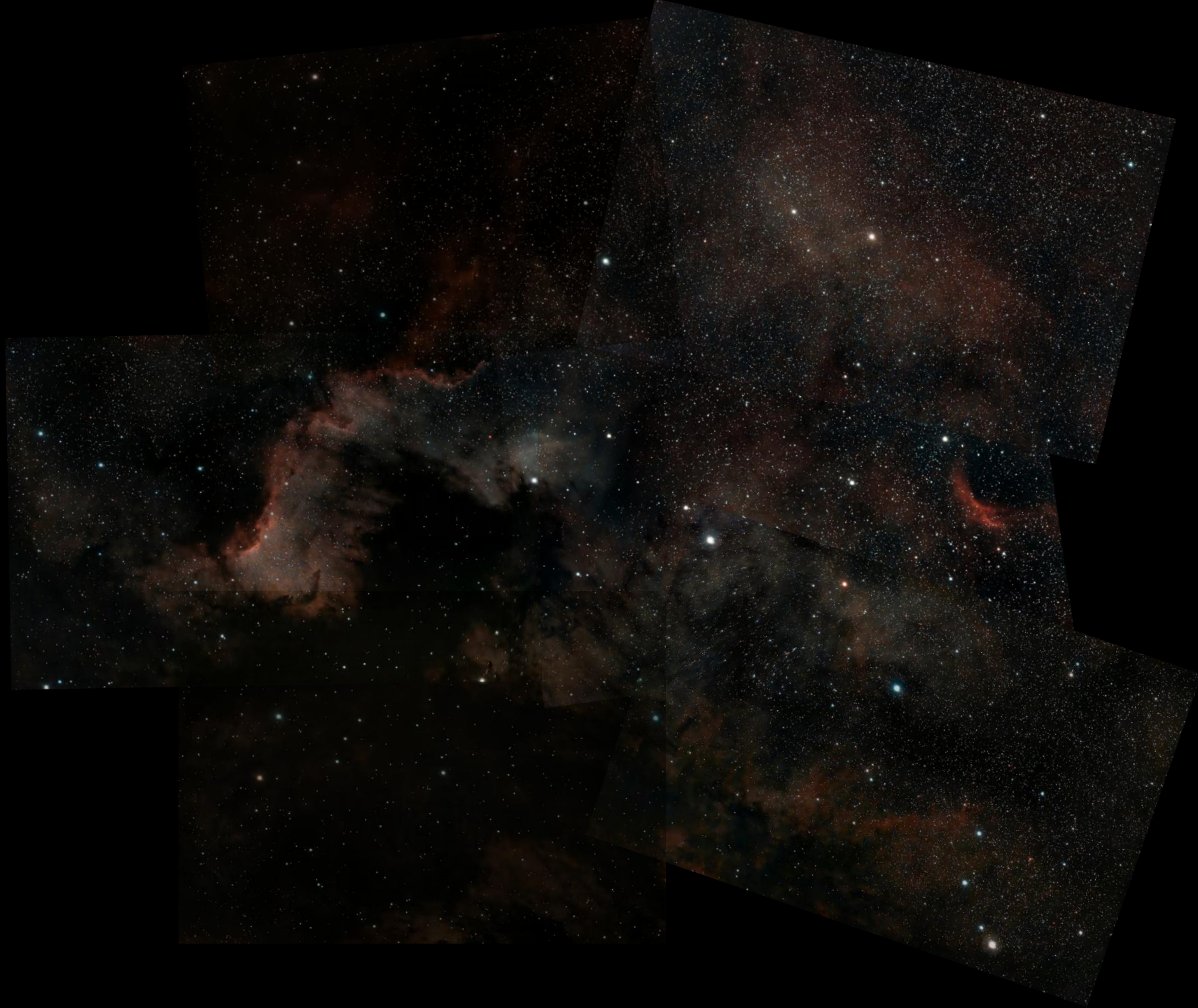
C-14 ZWO2600MC Optolong Quad and Enhance filters
120 sec exposures













Seestar S50 IC 434
Michael R Connelly / Westminster / 2024.12.17 23:36 47min



Seestar S50 M 31
Michael R Connelly / Westminster / 2024.12.30 22:51 38min



Michael R Connelly
m42, 65 min December 2024



IC 167
Nov/Dec 2024
Alpha Ridge Park

8-inch F/8 RC
LRGB (71,30,28,32)x4min
10h44m Total Exposure Time

ASI1600MM-C
Gain 0 (5e/ADU)
Wayne Baggett

Wayne Baggett



Thank you