



**STScI** | SPACE TELESCOPE  
SCIENCE INSTITUTE

**EXPANDING THE FRONTIERS OF SPACE  
ASTRONOMY**

# STScI Town Hall Welcome

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Kenneth Sembach  
Director

AAS (Virtual) Meeting, January 13, 2021



## STScI Status

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Hubble, MAST, Roman, Webb, and Makidon Optics Lab operations are progressing well. Our teams are available to help you achieve your science.

This is a busy year of preparations and on-site commissioning rehearsals for JWST launch in October.

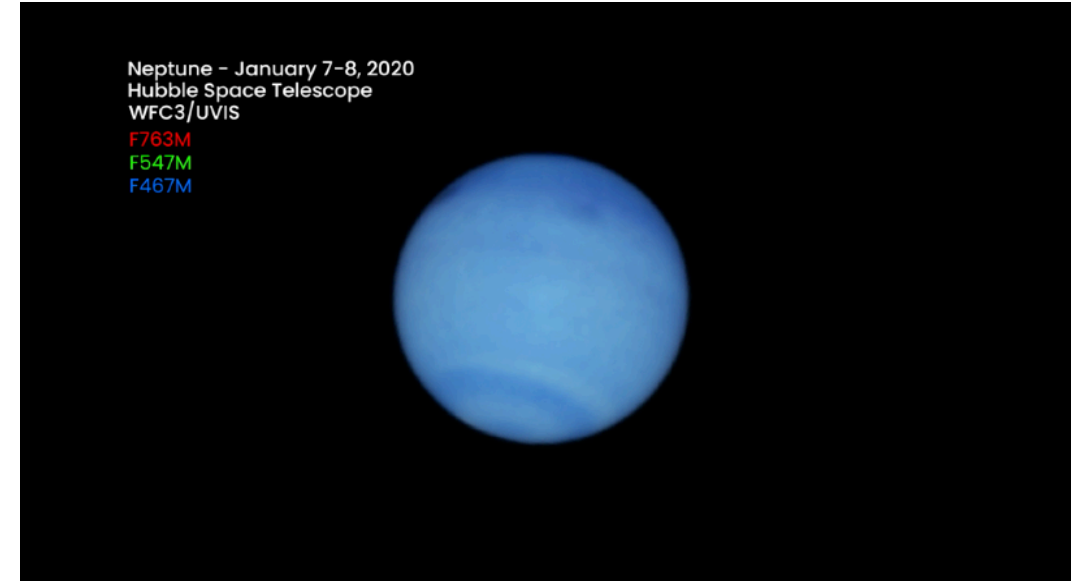
Other noteworthy items for this calendar year include:

- Most Institute work will continue to be done from home until pandemic conditions ease significantly
- Visitation to the Institute will be restricted until staff return to the office
- Workshops, colloquia, and committee meetings will be held virtually



# Hubble Operations Proceeding Normally During Pandemic

- Hubble operations mostly remote, with a few exceptions
  - Weekly delivery of the observing plan
  - Anomaly response and mitigation of gyro issues
- No concerns; observatory & instruments healthy
- Cycle 28 in progress
- Cycle 29 Call for Proposals to be released today (January 13), with April 9 deadline
- COS 2030 lifetime extension
  - Two new lifetime positions under development, with use in Cycle 29 (Oct 2021)



Dark Storm on Neptune Reverses Direction, Possibly Shedding a Fragment  
(Release #2020-59)

Science Results from Hubble's Archive - Special Session #424, tomorrow (January 14)



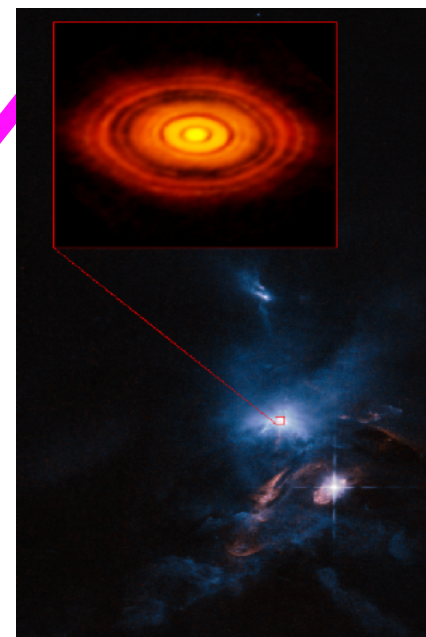
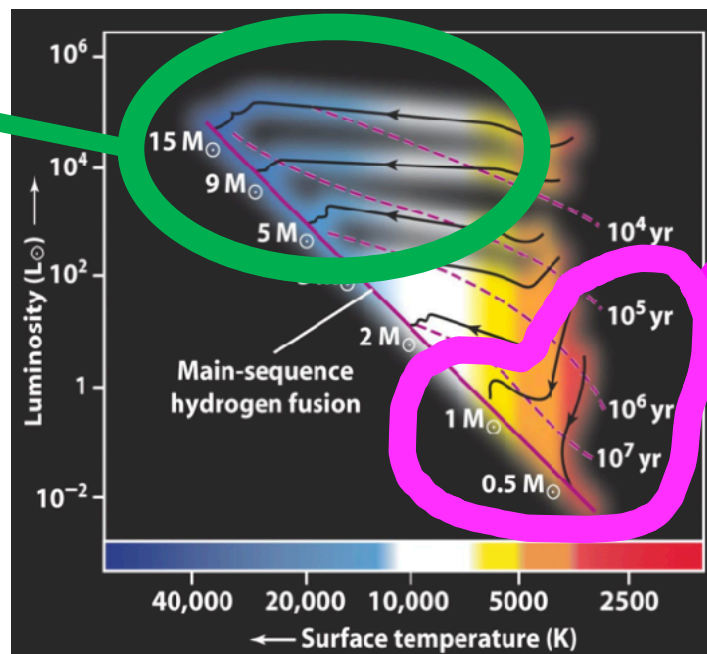


# Ultraviolet Legacy Library of Young Stars as Essential Standards (ULLYSES)

- Director's Discretionary program on behalf of the community to obtain a spectroscopic reference sample of young low and high mass stars
- First data release made available in November 2020. Observations will continue for several cycles.
- Accompanying talk by J. Roman-Duval



~500 orbits to extend the spectroscopic library of O and B stars to low metallicity (8-50% solar)

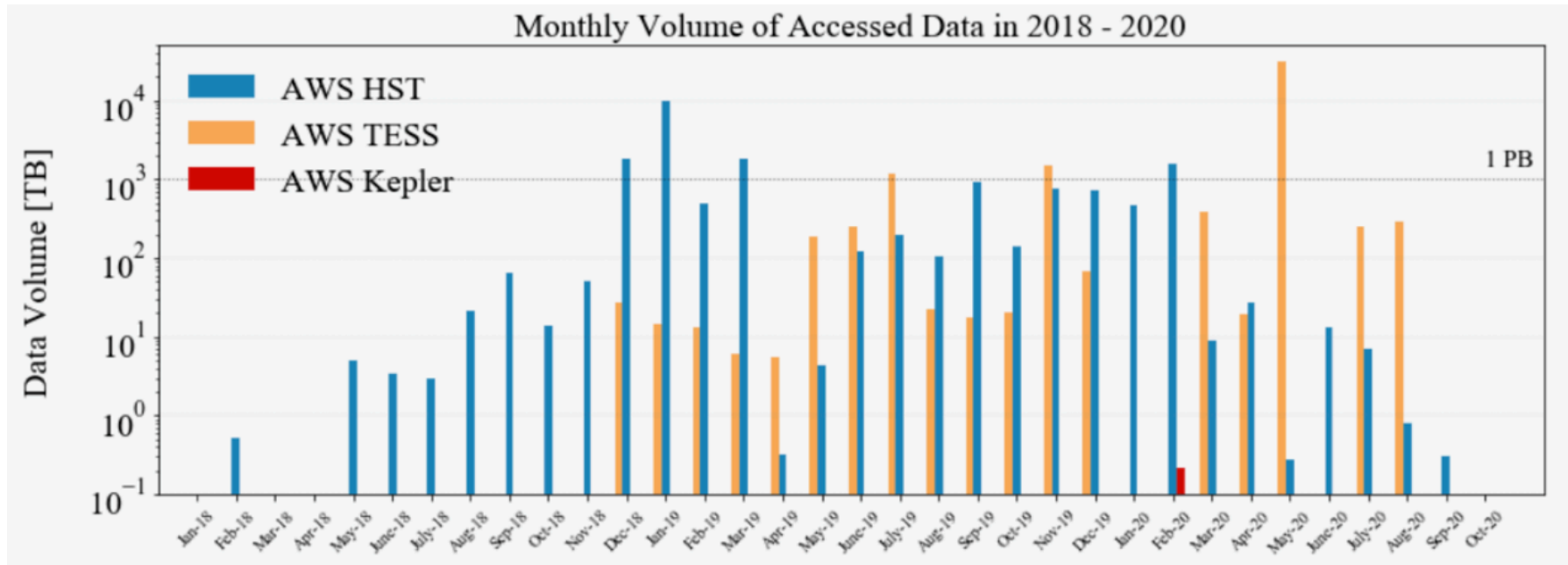


~500 orbits to obtain a spectroscopic library and time monitoring of T Tauri stars (younger than 10 Myr, mass < 1 M<sub>o</sub>)



# Data Science and Archives at STScI

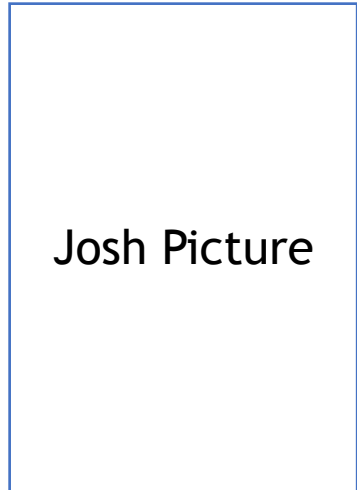
- Hubble, Kepler, and TESS datasets in the cloud are being used heavily, often exceeding 10,000 TB of access each month.
  - These cloud data are free to download and simple to access from any cloud or system.





## Data Science and Archives at STScI

- JWST spectroscopic data analysis tools (Jdaviz) work in desktop applications, in notebooks, and are being integrated into MAST for seamless online exploration.
- Kepler now has a repository of 20+ notebooks documenting many ways to do new science with this now fully archival mission.
- MAST has a new prototype data sonification project: *astronify*
  - See <https://astronify.readthedocs.io/>
- Data Science Mission Office has a new Head (Josh Peek) and a new Data Scientist (Michelle Ntampaka)







# James Webb Space Telescope - It's Launch Year!

Final tests, closeout, and review this spring.

Ship to launch site this summer.

Launch this fall: October 31

JWST Town Hall Tomorrow  
(Session #419, 1:40-2:40 PM)

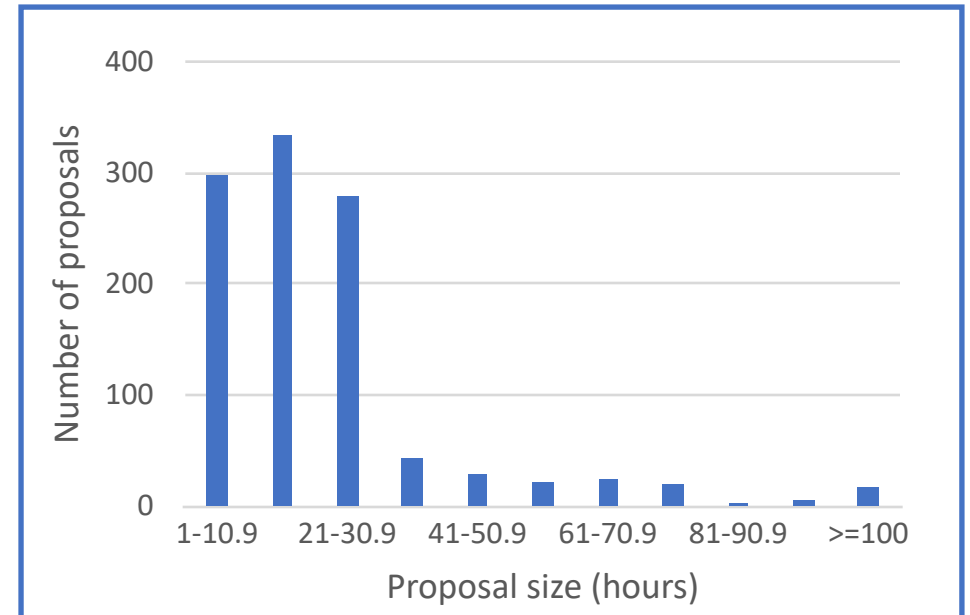


*To help ensure success, technicians carefully inspect the James Webb Space Telescope's sunshield before deployment testing begins, while it is occurring, and perform a full post-test analysis to ensure the observatory is operating as planned. Credits: NASA/Chris Gunn*



# JWST Cycle 1 – Summary Statistics

- 1173 proposals were received by the JWST Cycle 1 GO/AR deadline, including
  - 1084 GO proposals for ~24,500 hours (4:1 over-subscription)
  - 14 Survey proposals
  - 75 AR proposals
  - 374 proposal led by ESA PIs (31.9%)
  - 44 proposals led by Canadian PIs (3.8%)
- 12766 investigators in total
  - 4332 unique investigators (PI, co-PI, or co-I)
    - 1985 have not appeared on past HST proposals
  - 31.5% of PIs are female
  - 10.4% of investigators (122) are students
- TAC meeting: February 16-19 (Galactic panels), February 23-26 (Extragalactic panels) & March 1-4 (Executive Committee)
- More details at the JWST Town Hall (January 14, Session 419, 1:40-2:40 PM)







# Roman Space Telescope

STScI is the Roman Science Operations Center.

Observatory science program and core community surveys will be major areas of discussion with the community this year.

See accompanying talk by K. Gilbert.



**Nancy Grace Roman**  
1925-2018



Excellent progress to date on observatory development and ground systems, despite pandemic conditions

On track for launch in mid-2020s

Roman Town Hall Friday (Session #520, 1:40-2:40 PM)

# STScI to Broadcast Our Colloquia Live to All

- The STScI spring colloquium series begins on 10-Feb-2021. The talks are held every Tuesday through 19-May-2021, starting at 3 PM ET.
- We will be broadcasting these talks live to the entire community.
- We will stream the colloquia via Facebook Live. You do not need to have a Facebook account to access our Facebook Live stream.
- To watch the spring colloquia, please go to: <https://www.facebook.com/STScILiveScienceEvents>
- The 2021 Spring colloquium speaker and talk info will be posted on STScI's main website shortly.

Placeholder,  
OPO to update



# STScI Town Hall

Ken Sembach ([sembach@stsci.edu](mailto:sembach@stsci.edu))

*Welcome*

Julia Foman-Duval ([duval@stsci.edu](mailto:duval@stsci.edu))

*The Ultraviolet Legacy Library on Young Stars as Essential Standards (ULYSES) Director's Discretionary Program*

Karoline Gilbert ([kgilbert@stsci.edu](mailto:kgilbert@stsci.edu))

XXX

Reini Soummer ([soummer@stsci.edu](mailto:soummer@stsci.edu))

XXX

All presentations can be found at:

<https://outerspace.stsci.edu/display/AAS/STScI+Town+Hall+-+June+2+2020>

Placeholder, need  
input from Neill