



STScI | SPACE TELESCOPE
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

JWST Science Timeline – Cycle 4 and Beyond

Katey Alatalo, Neill Reid (JWST Science Policies Group, STScI)

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JWST Cycle 4 Selection Process



JWST Cycle 4 Timeline

Date	Milestone
October 16, 2024	GO/AR Cycle 4 Proposal Deadline
November 4, 2024	Orientation meeting for Discussion panelists
November 11, 2024	STScI Releases proposals to panelists for review and preliminary grading
January 10, 2025	Deadline for panelists to submit preliminary grades for assigned proposals
February 3 – 6, 2025	Telescope Allocation Committee Meetings: Galactic Discussion Panels
February 4 – 7, 2025	Telescope Allocation Committee Meetings: Extragalactic Discussion Panels
February 10 – 11, 2025	Telescope Allocation Committee: Galactic EC Meeting
February 12 – 13, 2025	Telescope Allocation Committee: Extragalactic EC Meeting
February 26, 2025	Director’s Review
February 27 – June 30, 2025	Program Implementation of accepted proposals
Early-Mid March, 2025	PI notification letters are distributed
July 1, 2025	Beginning of Cycle 4 Observations

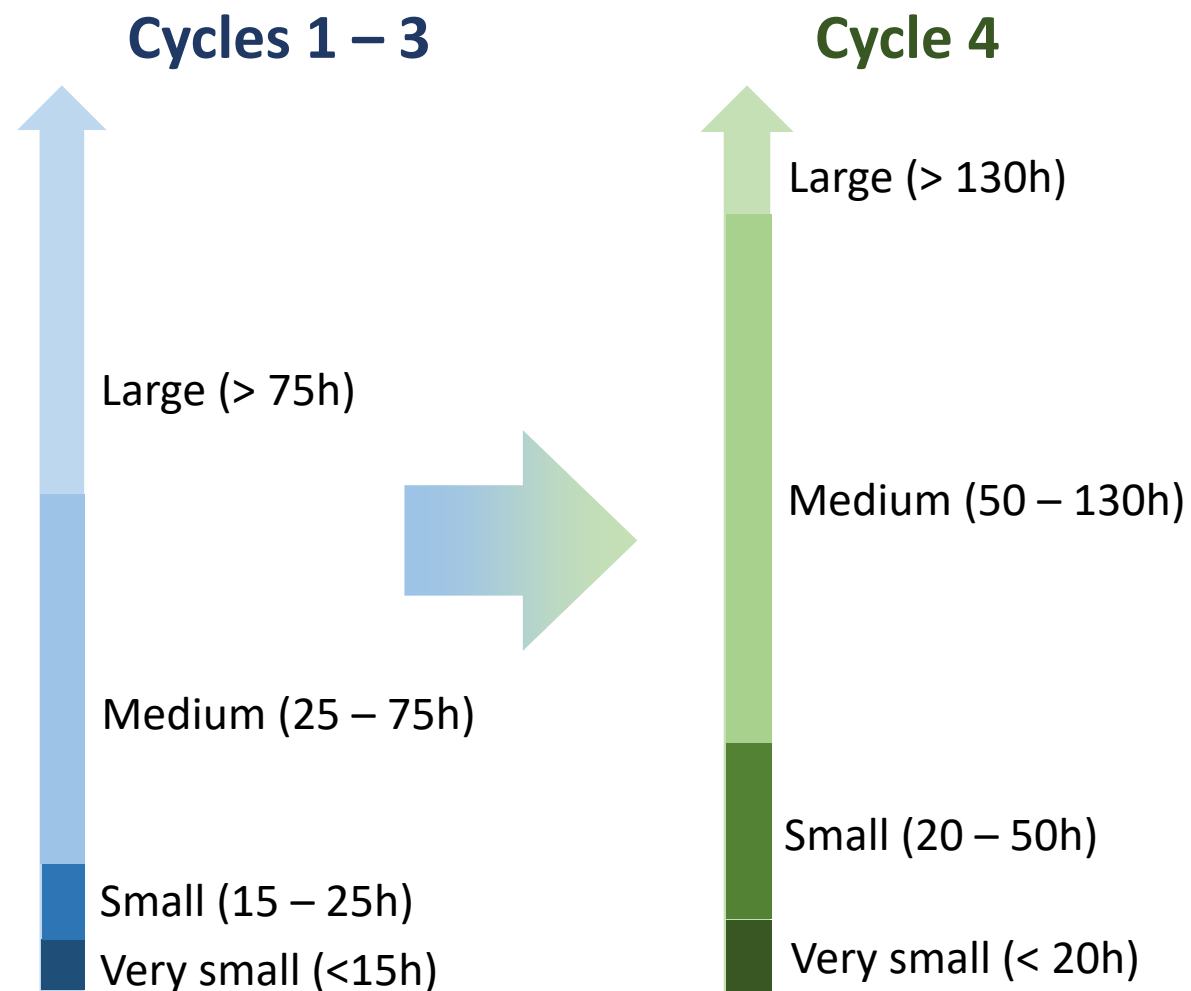


Changes made in Cycle 4

- Page limit changes

Proposal Category†	Total Page Limit for PDF Attachment
Very Small GO Small GO Long-Term GO Calibration GO and AR Survey Regular AR Cloud Computing AR Theory AR Data Science Software AR	4+1* *One page for: Special Requirements, Justify Coordinated Parallel Observations, Justify Duplications and Justify Coordinated Observations with Other Facilities.
Medium GO Combined GO-Archival	5+1*
Large GO Treasury GO Legacy AR	6+1*

- Proposal size category changes





Changes made in Cycle 4

- Science categories

Cycles 1 – 3

Exoplanets

Galaxies

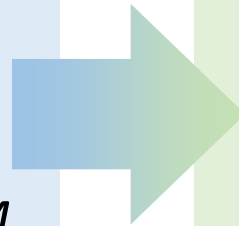
Stellar Physics

Stellar Populations and the ISM

Solar System

SMBH and AGN

~~*Large Scale Structure*~~



Cycle 4

Exoplanet Atmospheres and Habitability

Exoplanetary System Formation and Dynamics

Stars and Stellar Populations

Gas, Dust and the Interstellar Medium

Nearby Galaxies to Cosmic Noon

High Redshift Galaxies and the Distant Universe

Super Massive Black Holes and Active Galaxies

Solar System



Expected Cycle 4 Resources

- General Observer programs – ~8,500 hours available in total
 - Very Small programs, up to 20 hours, ~1,950 hours
 - Small programs, up to 50 hours, ~2,900 hours
 - Medium programs, $50 < t < 130$ hours, ~2,250 hours
 - Large programs, > 130 hours, ~1,400 hours
 - *Exact number of hours allocated per category depends on proposal pressure*
- Survey programs – ~1,000 targets available across all panels
 - Used to improve long range plan efficiency
 - Self-contained observations of targets drawn from a large sample
 - ~20% completion fraction from previous cycles
- Pure Parallel Programs
 - Attached to suitable Cycle 4 prime observations
- Archival programs
 - Proposal for analysis datasets that are publicly available at the start of Cycle 4
- JWST Joint Programs: HST, Chandra, XMM, NASA Keck, NOIRLab, ALMA, NRAO, TESS



Cycle 4 Submitted Programs

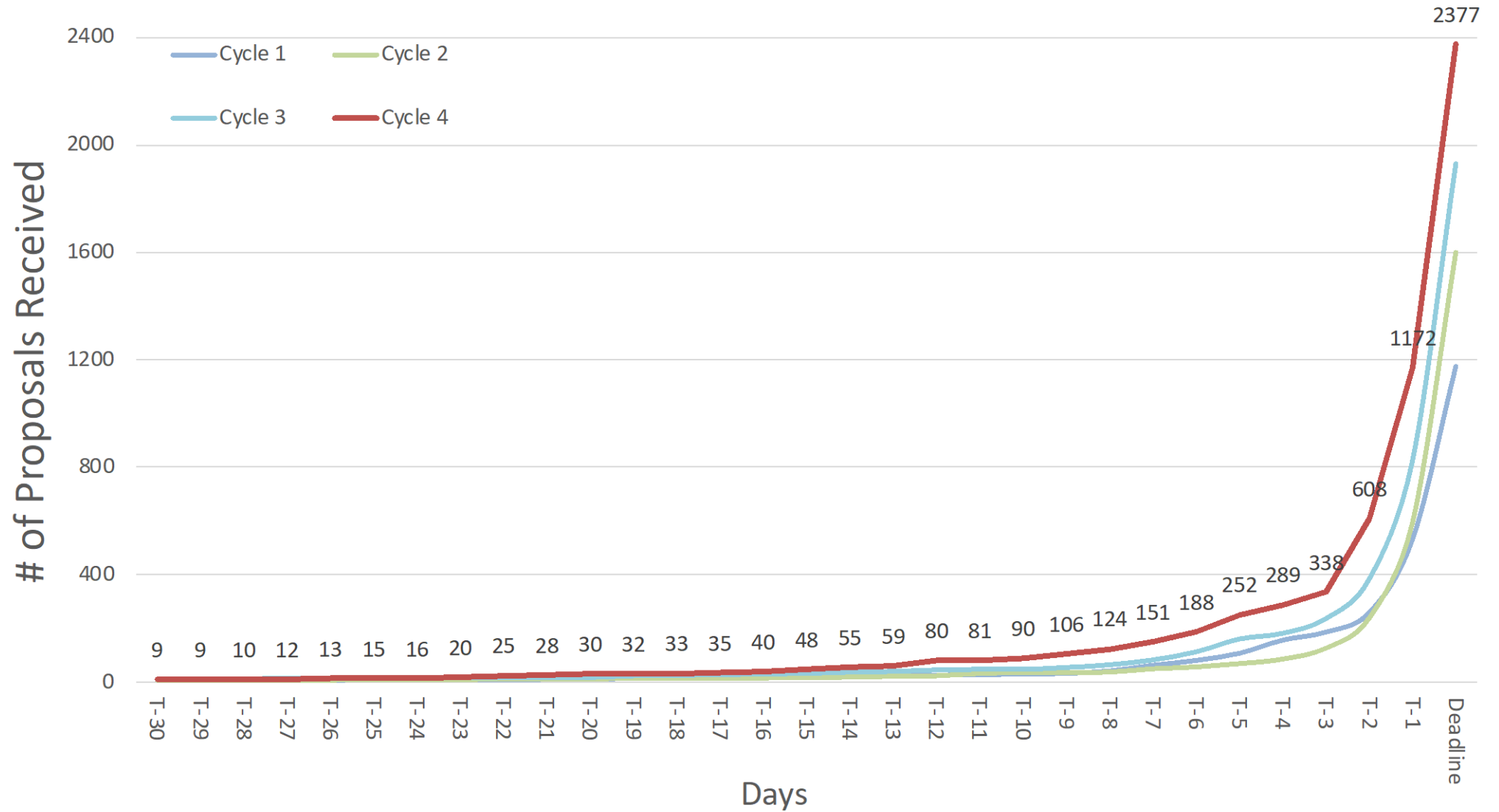
- The JWST Cycle 4 GO/AR deadline was on October 16, 2024
 - A total of 2,377 submissions were received by this date
 - Largest proposal volumes for any observatory to date
- The 2377 (*Cyc3, 1931*) complete proposals include
 - 710 proposals led by ESA PIs (30%)
 - 78 proposals led by Canadian PIs (3.3%)
 - 31,255 Co-investigators in total
 - 6,845 Unique investigators (PI, Co-PI & co-I)
- Representation from
 - 61 Countries (incl. Bangladesh, Hong Kong, Morocco)
 - 46 US states + DC and Puerto Rico
- More detailed demographics are available in TAC Orientation Materials
- TAC meeting is scheduled for February 3 – February 7, 2025 (Discussion Panels) and February 10 – 13, 2024 (Executive Committees)
- JWST EC has been split into Galactic and Extragalactic Categories



Cycle 4 Call for Proposals



JWST Proposal Submissions



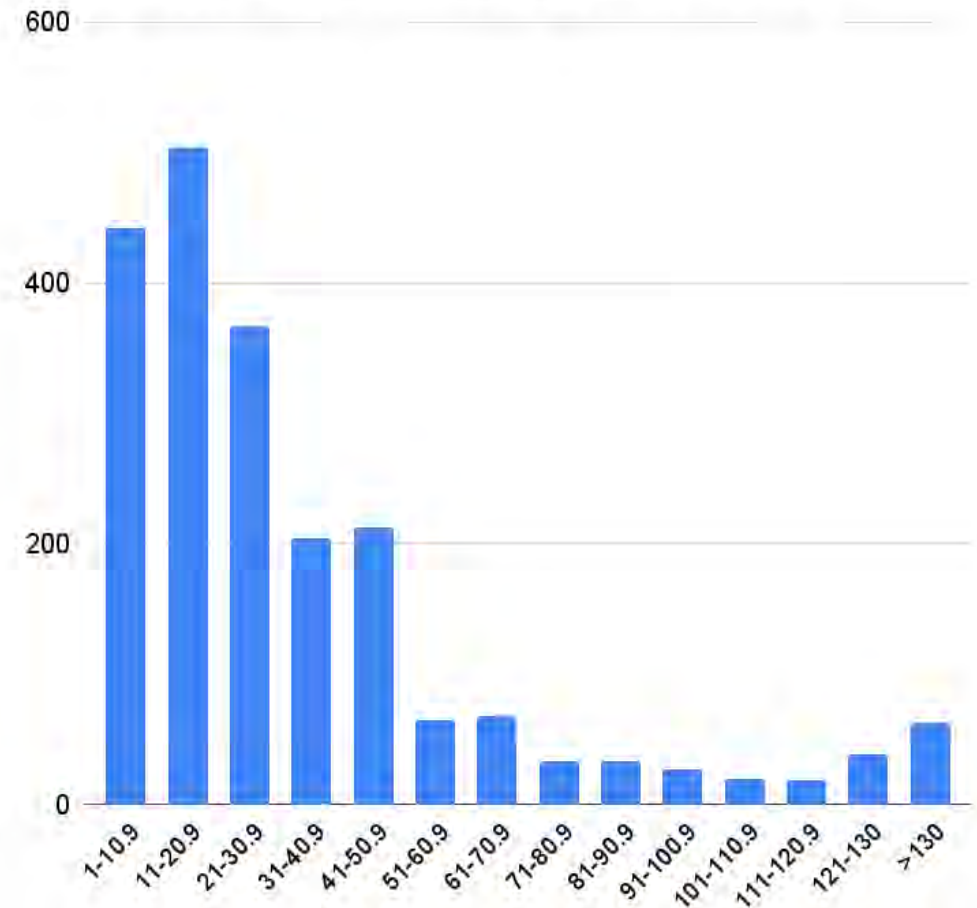


Cycle 4 Proposal Statistics

- 2,107 (1,753) GO proposals for 75,138 (48,781) Hours, including
 - 908 Very Small for 10,299 hours
 - 796 Small for 26454 hours
 - 326 Medium for 25610 hours
 - 77 Large for 12775 hours
 - 41 Treasury for 6837 hours
 - 6 GO Calibration for 76 hours
 - 10 Pure Parallel proposals for 3,888 parallel hours
- 50 (39) Survey proposals
- 217 (139) Archival Research
 - 106 Regular
 - 94 Theory
 - 20 Legacy
 - 4 Cloud Computing
 - 15 Data Science Software

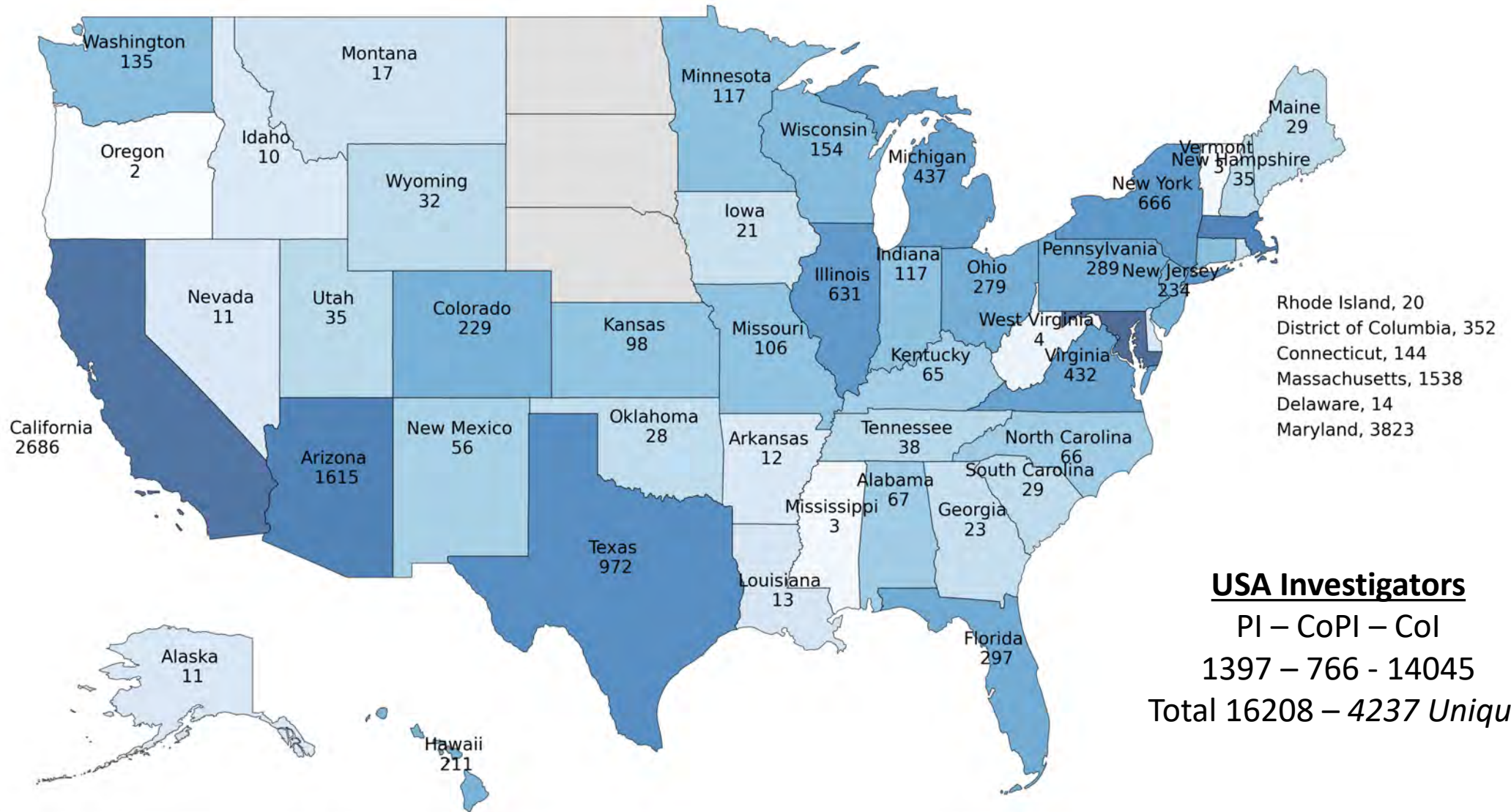
(Some proposals are in multiple categories)

JWST Proposals Per Time Request





US Investigators Incidence Per State



USA Investigators

PI – CoPI – Col

1397 – 766 - 14045

Total 16208 – 4237 Unique



JWST Cycle 4 Grants Plans

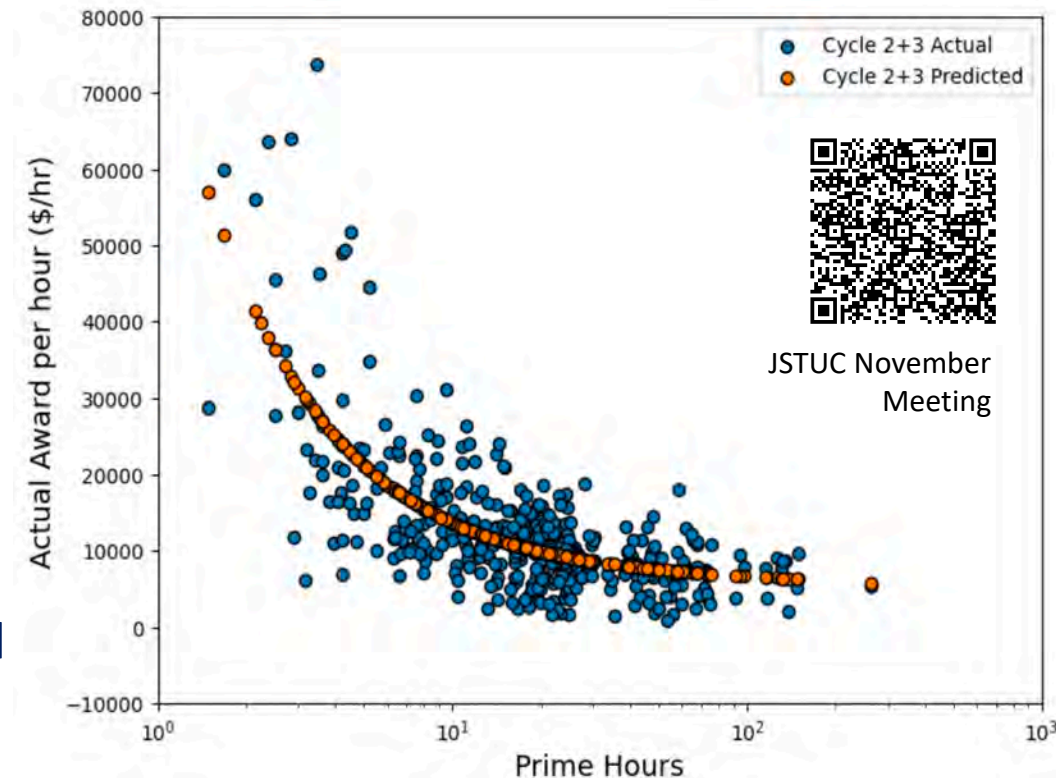


JWST Cycle 4 Implements a Grants Formula

- JWST Cycle 4 will implement a formula for funding awards
- Working group was chaired by Ata Sarajedini (Florida Atlantic University)
 - Report was released on August 1, 2024
- The Grants WG determined that program size was the major factor that affected funding levels for Cycles 2 & 3 programs
 - with substantial scatter
- We will apply this formalism to Cycle 4 programs
 - Time available is increased 5500 → 8500 hrs
 - Total funding remains at \$60 million
 - *Implies an average funding reduction of ~65% per hour*
- Each program will be assigned a “not to exceed” \$\$
 - GO formula will depend on exact Cy 4 science program
 - Distribution of program size, number of ARs etc
 - Flat maximum values for AR, Legacy, Survey, Pure Parallel
 - See November JSTUC meeting for more details



JWST Grants WG Report





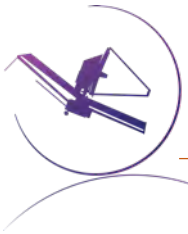
Cycle 4 Grants Timeline

Date	Milestone
Mid-February, 2025	Contract value from JWST Project
Early March, 2025	Cycle 4 Proposal Notifications are distributed
Early-Mid March, 2025	Cycle 4 Budget Notification Letters are distributed
April 17, 2025	Cycle 4 Budget Deadline at 5pm EDT
July 8-11, 2025	JWST Cycle 4 Financial Review Committee Meeting
July 1, 2025	Cycle 4 Observations start
Mid-August, 2025	Director's Office Debrief
Mid-August, 2025	Program support letters are distributed

- All budgets submitted must fall within the 'not to exceed' amount
- Archival proposals and programs requesting >\$400K will be reviewed by a Financial Review Committee
- There will be a J-Webbinar prior to Cycle 4 notifications about the new budget process
- As in Cycle 3, Grants Administration will hold a webinar soon after the Cycle 4 budget notifications are distributed with a Q&A session to assist budget preparation.
- *Even with a formula, investigators must submit budgets that are in-scope and compliant!*



JWST Cycle 5 Plans



Cycle 5 Science Timeline

Date	Milestone
August 1, 2025	Cycle 5 Call for Proposals
October 15, 2025	JWST Cycle 5 Proposal Deadline
November 12, 2025	Cycle 5 Proposals Released to the TAC
February 2– 6, 2026	Telescope Allocation Committee Meetings: Discussion Panels
February 9 – 12, 2026	Telescope Allocation Committee Meetings: Executive Committee
February 26, 2026	Director's Review
Mid March, 2026	PI notification letters are distributed
July 1, 2026	Beginning of Cycle 5 Observations



Volunteer to Serve on the TAC!

Pages / SMO General Information

JWST Review Volunteer Form

Created by John Debes, last modified by Kimberly Oyler on Aug 08, 2022

STScI solicits proposals for JWST Observing, Archival, and Theoretical Research and relies on volunteers to conduct dual anonymous peer review of the proposals. STScI seeks to broaden its volunteer support from astronomical researchers who are at least two years past PhD completion. Researchers from underrepresented groups are particularly encouraged to volunteer. We seek to have volunteers to review proposals primarily for scientific merit, impact, and the unique use or support of JWST's capabilities. There is currently one way to participate:

- **Main Review – Panel** : Reading and grading of proposals in your own time over a period of ~1 month followed by a 3-day virtual discussion meeting, brief comments provided after. You will be assigned to a panel aligned with your area of expertise that is headed by a chair and vice-chair.

Contact Information

Name *

Institution *

Email *

Year of PhD *

JWST is slated for another record-breaking number of proposals! Evaluating the proposals submitted is an enormous endeavor requiring hundreds of experts from the astronomical community. ***We want you!***



Do you have any questions or suggestions for JWST? Get in touch with the J-STUC: the JWST Science and Telescope User's Committee!

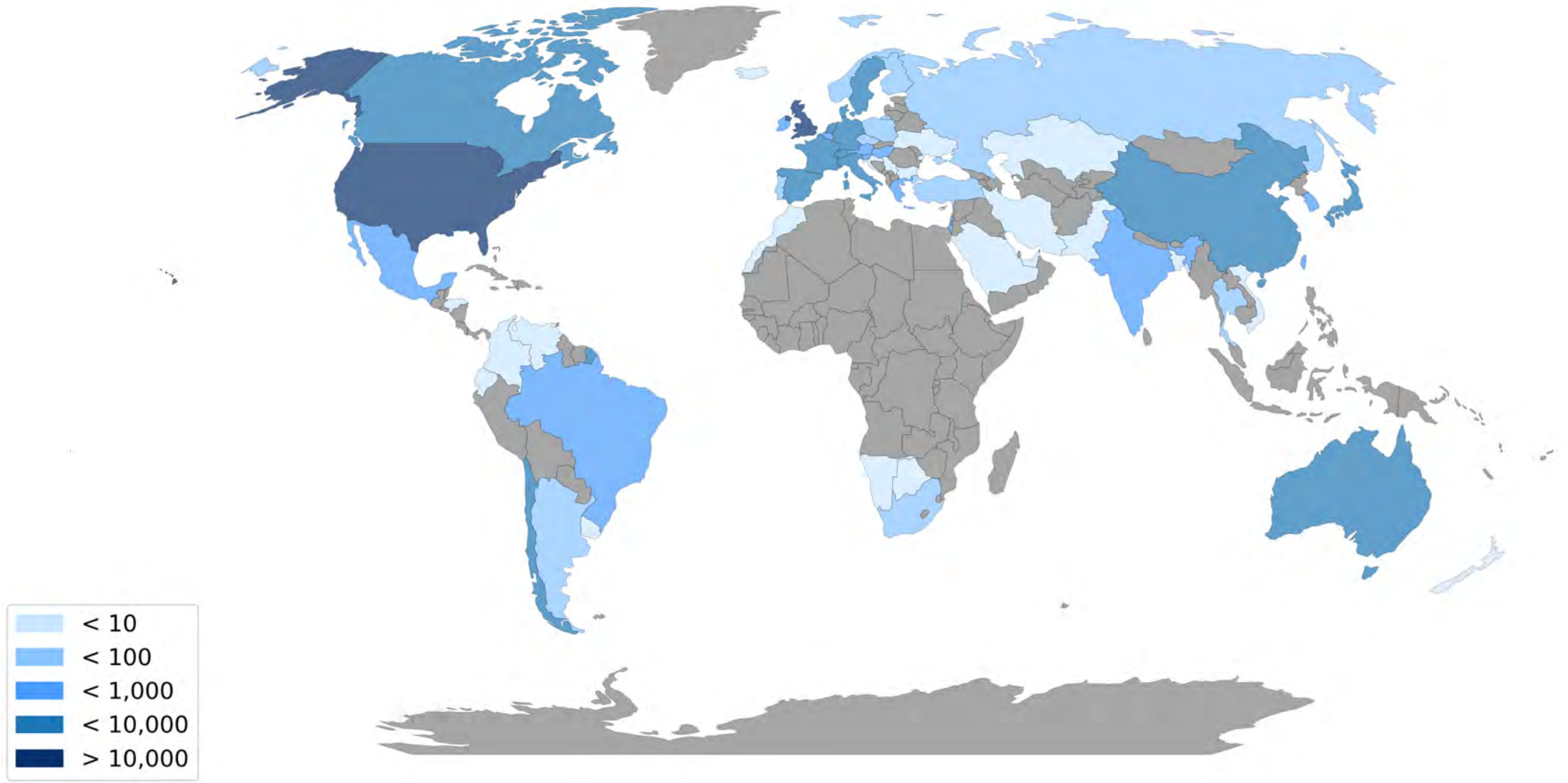


J-STUC Website

JWST TAC Volunteer Form



JWST is a worldwide observatory





Summary

- Cycle 4
 - 2,377 GO & AR proposals were received by the October 16 deadline
 - 6,845 unique investigators worldwide
 - Over-subscription factor ~9:1
 - The TAC will meet in early February
 - Expect notifications in mid March
 - Offer 8,500 hours, a >50% increase from Cycle 3
 - Use size and science categories better tuned to the JWST community
 - Include a formula-based approach for budget allocations for successful programs
- Cycle 5 will
 - Have a proposal deadline of October 15, 2025 with the TAC held in early February 2026. The JWST Science Timeline is expected to follow a similar cadence in future cycles.
 - **Likely** be larger than ~2,400 proposals of Cycle 4 so ***please volunteer to serve on the TAC!***