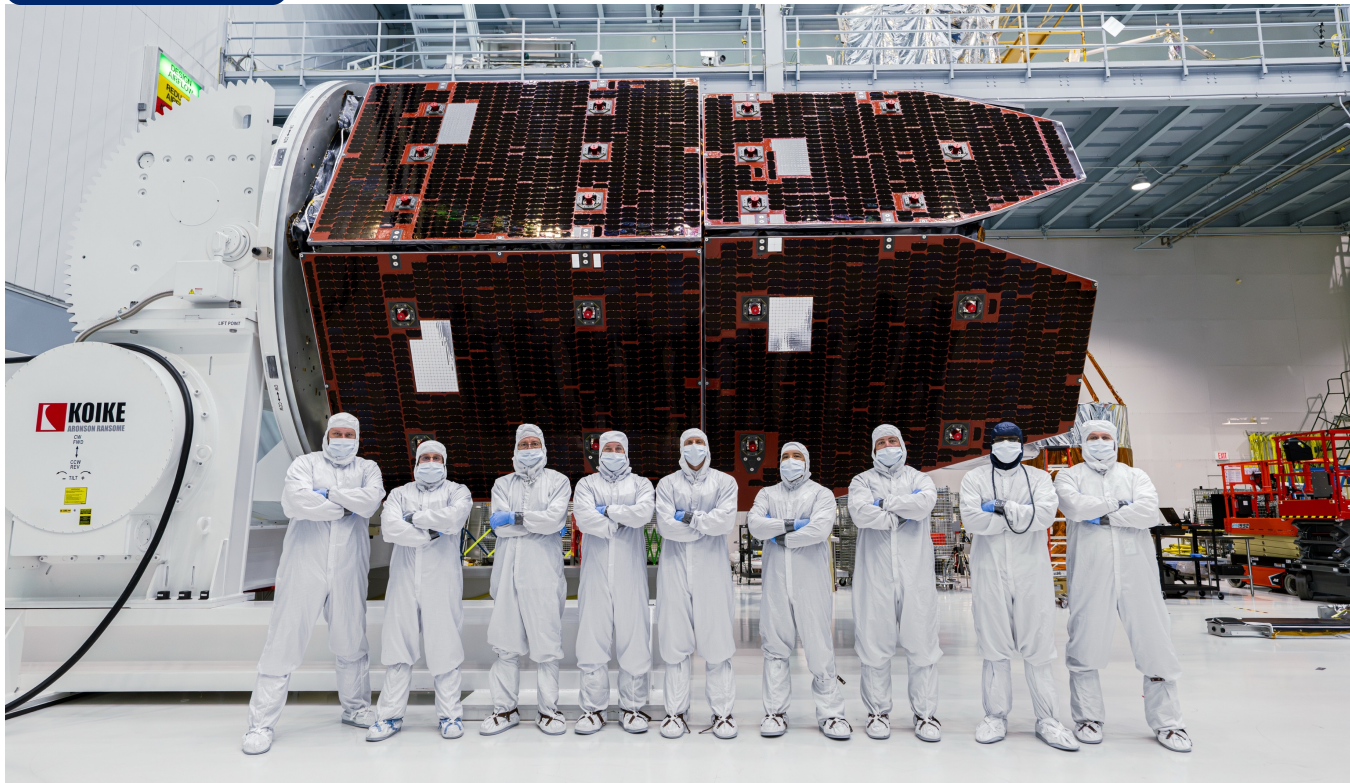




Roman Cycle 1 Proposals説明会



1. Roman update
2. Cycle 1 General Investigator Program Call for Proposals
3. Roman Research Nexus
4. Roman Science Collaboration (RSC)

Sumi, Yamada, Daikuhara, Miyazaki, Roman-J project team

2025/1/29, Roman Cycle 1 Proposals説明会@online

Roman Space Telescope

Diameter: 2.4m given from NRO ([National Reconnaissance Office](#))

Wavelength: $\lambda = 0.6 - 2.3 \mu\text{m}$

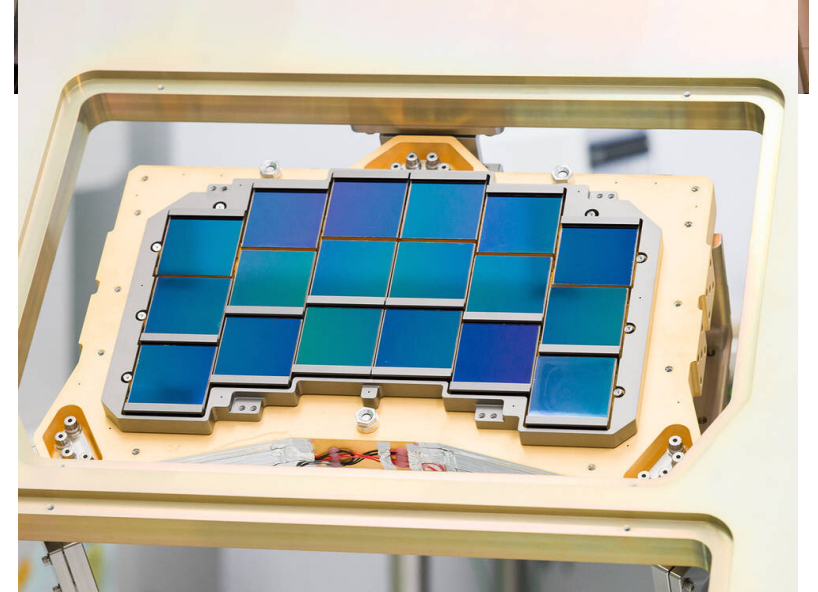
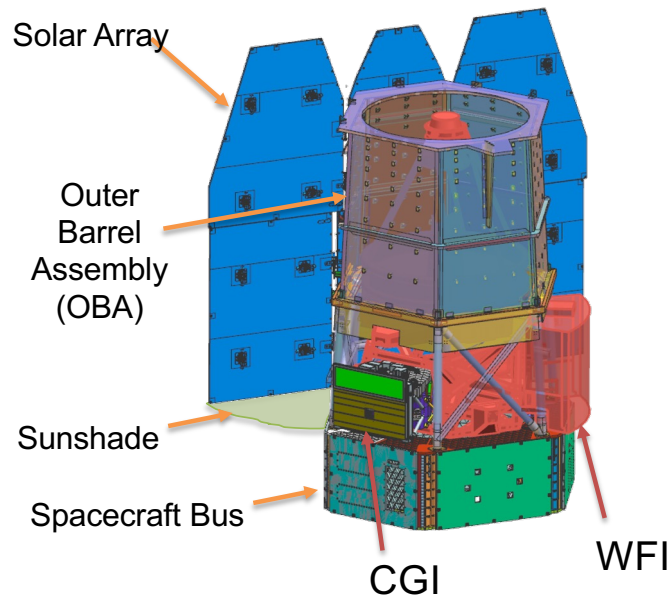
Wide Field Inst. (WFI)(FOV: 0.281deg.^2)

Coronagraph Inst. (CGI) **tech demo for HWO**

Orbit: L2

Mission life time: 5.3 years:

Launch Vehicle; SpaceX (falcon heavy)



Wide Field Instrument

- FOV: **0.28**deg²
- Opt/NIR (0.6–**2.3** μ m)



Moon (average size seen from Earth)

- ~90 × bigger than HST–ACS FOV,
- ~200 × bigger than IR channel of WFC3
- ~**1000** × survey power

Slitless grism: 1.0-1.93 μm, R: 435-865 for HLS

Slitless prism: 0.75-1.8 μm, R: 80-170 for SN

18 x 4k x 4k H4RG-10
288 Mpixels, 0.11arcsec/pix



HST/ACS



HST/WFC3



JWST/NIRCAM

Each square is a H4RG-10
4k x 4k, 10 micron pitch

Roman Observation strategy

● Dark Energy/Modified Gravity (~2.5yr)

◆ High Latitude Survey (HLS) (galaxy distribution)

2000deg², image(YJH)+spectra(R~800) Y<26.7, J<26.9, H<26.7, F184W<26.2

- Weak Lensing (WL)
- Red shift space distortion (RSD)
- Baryon Acoustic Oscillation (BAO)

Dark matter,
Structure growth

◆ IaSNe survey

5, 9, 27deg², imaging+IFC (R~100)

Cosmic acceleration history

● Exoplanets :

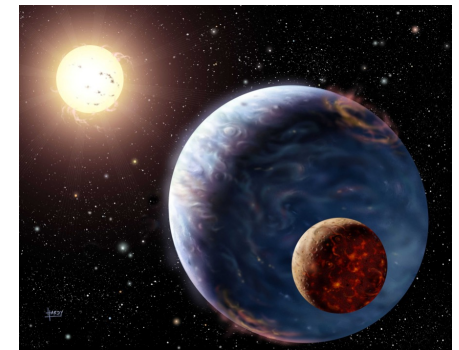
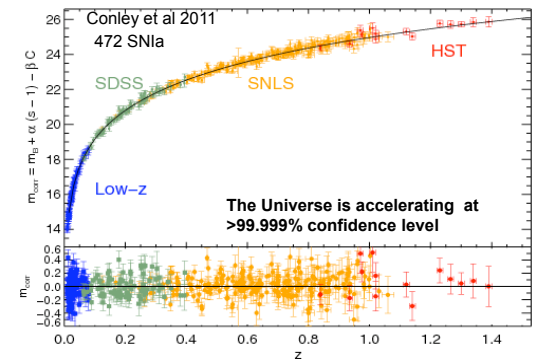
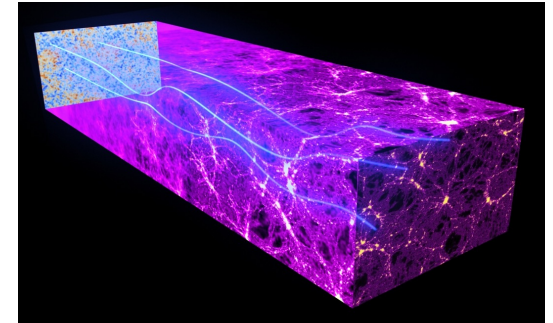
◆ Microlensing exoplanet search (~1.2yr)

Complete statistical census of Planetary systems
which Kepler started

◆ Direct observation by coronagraph (~0.3yr)

optical, contrast 10⁻⁹, IWA 0.2"

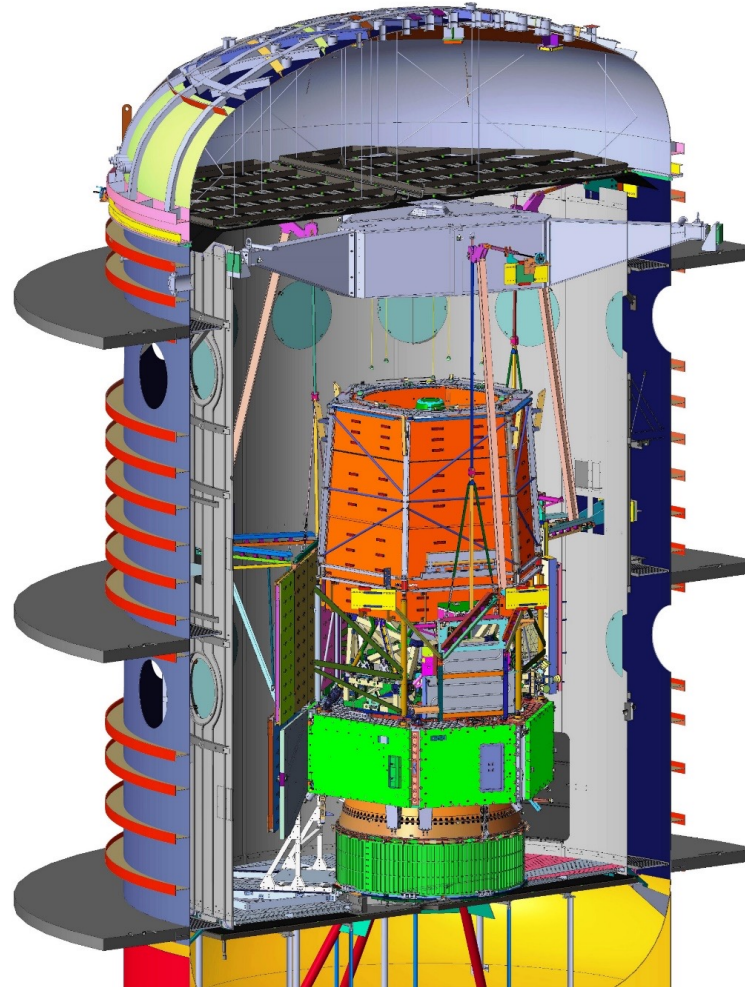
● General Astrophysics Surveys (GAS) (25%, 1.5yr)



TVAC Test of Spacecraft+Integrated Payload Assembly (SCIPA)

- verify the integrated system at protoflight hot and cold conditions and to perform optical testing at nominal operating temperatures.
- Vibration and acoustic testing already completed
- Components have also undergone thermal vacuum testing
- Also running a few Mission Readiness Tests

Completed in
Nov 2025



Roman Status

Completed

- **The Roman Observatory mechanically integrated November 25, 2025!**

- All hardware delivered with excellent performance!
 - Meets or exceeds all science requirements, e.g. pixel operability is >99% (c.f. requirement of >95%), wave front stability much better than requirements and more
- Spacecraft and Integrated Payload Assembly (SCIPA) and OBA/SASS/DAC (OSD) completed highly successful environmental test campaigns **on schedule**
 - Successful Acceptance Reviews for SCIPA and OSD in mid-November

- **Roman Ground Segment on track**

- Mission Readiness Tests proceeding well – opportunity to make sure we are ready for commissioning and operations
 - Flight like rehearsals of specific portions of commissioning and operations
 - Held 24 MRTs, and have 35 more planned.
- White Sands 1 antenna upgrades on track. All hardware upgrades installed and currently on track to support Dec. 19 site acceptance test

- **Project schedule is on track to planned launch September 28, 2026**

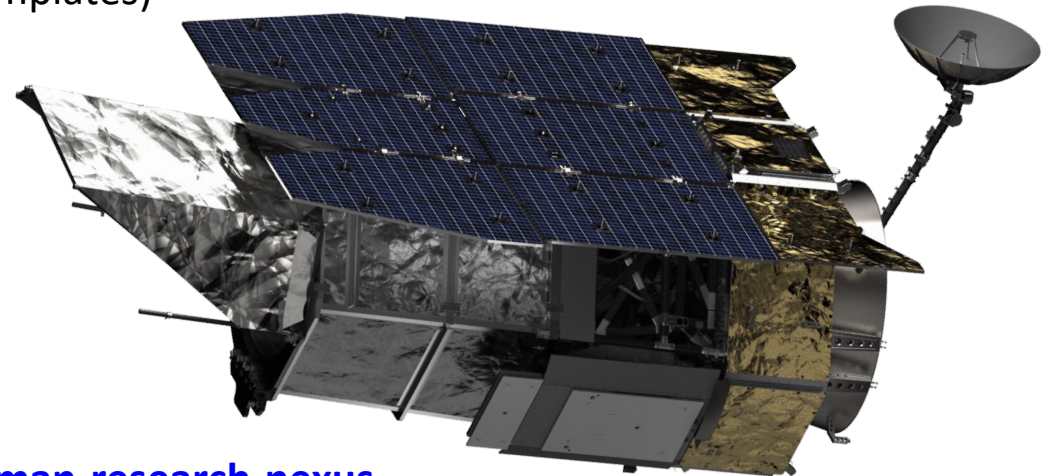
- Ship to Florida in June
- Science operations (and public data) from January 2027



1. Cycle 1 General Investigator Program Call for Proposals (Daikuhara)

<https://roman-docs.ipac.caltech.edu/roman-proposals-home/cycle-1-call-for-proposals>

- [proposal submission procedure](#). (Proposal Templates)
- [Roman Telescope Proposal System \(RTPS\)](#)
- [Exposure Time Calculator \(ETC\)](#),
- [Roman Astronomer's Proposal Tool \(APT\)](#)
- [Roman Documentation \(RDox\)](#).
- [Roman Help Desk](#).(NASA)



2. Roman Research Nexus (Miyazaki)



cloud-based science platform

<https://roman-docs.stsci.edu/data-handbook/roman-research-nexus>

3. Roman Science Collaboration (RSC)

- discussion @wiki/slack

Signe up at <https://outerspace.stsci.edu/spaces/RSCPUB/overview>






Nancy Grace Roman Space Telescope

Cycle 1 General Investigator Program Call for Proposals

Issued by the
Roman Science Support Center
California Institute of Technology / IPAC
Pasadena, California, USA

Key Dates:
Call for Proposals Issued: December 10, 2025
Proposals Due: Tuesday, March 17, 2026 (5:00pm PDT)

<https://roman-docs.ipac.caltech.edu/roman-proposals-home/cycle-1-call-for-proposals>



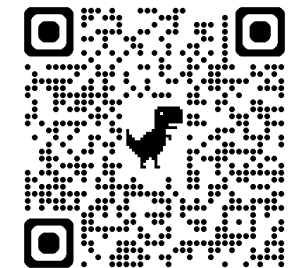
Release Date: December 10, 2025

Proposals Due: March 17, 2026, 5pm PDT

Check out the Call for Proposals here on RDox:

<https://roman-docs.ipac.caltech.edu/roman-proposals-home/cycle-1-call-for-proposals>

- **Email blasts, social media / slack posts**



Cycle 1 Call for Proposals



- **Five annual calls for proposals expected**
 - Three will contain solicitations for new Roman observations: Cycles 1, 3, & 4 (subject to change)
 - Approximately 30 GAS programs in total supported during the prime mission
- **Roman Telescope Proposal System (RTPS)**
 - Web interface for proposal submission of general info and PDF documents
 - If requesting observing time: upload APT file
- **Single phase proposal process – no detailed budgets**
 - Selection of proposal category (S/M/L) that corresponds to the funding level
 - Selection of Nexus bin (1/2/3/4) that corresponds to Nexus credits
 - Small < 150K USD,
 - Medium 150K USD to 450K USD,
 - Large 450K USD to 1.2M USD

The screenshot shows the RTPS web interface for proposal submission. At the top, there are navigation links: Home, New Proposal, New DR, My Proposals, Panels, Admin, Settings, and Sign Out. The main content area is titled 'Proposals' and includes a 'Upload JSON' button. Below this, there are several sections for entering proposal information:

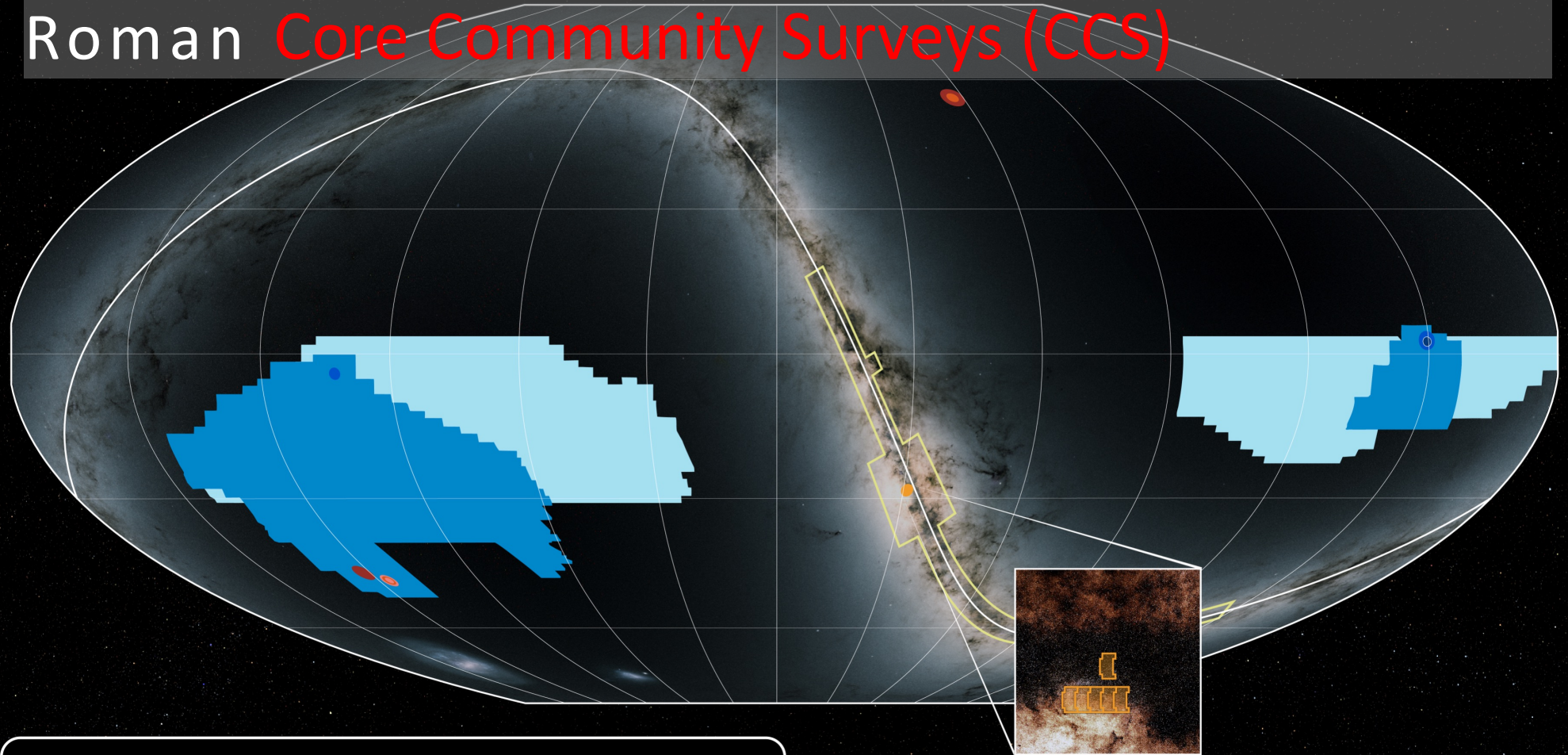
- Proposal General Info:** Includes a 'Propose Title' field with a 'Clear Form' button and a 'Create New' link. A note states: 'Please enter a proposal title between 1 and 200 characters.'
- Science Category:** A dropdown menu with a note: 'Please select a science category.'
- Type and Hours:** Fields for 'Type' and 'Hours' with a note: 'Please select a proposal type.'
- Abstract:** A text area with a note: 'Please enter an abstract between 1 and 2000 characters.'
- Summary of Observations:** A text area with a note: 'Our limit is 10000 characters.'
- Primary Investigator Info:** Fields for 'First Name', 'Last Name', 'Email', and 'Institution'. Notes include: 'Please enter a first name', 'Please enter a last name', 'Please enter a valid email', and 'Please enter an institution.'
- Co-Investigator Info:** A table with columns for 'First Name', 'Last Name', 'Country', 'Institution', 'Email', 'Technical Contact', and 'Co-PI?'. An 'Add Investigator' button is at the bottom right.
- Document Attachments:** Two sections for uploading PDFs: 'Add Scientific Justification' and 'Add Team Expertise'. Each has a 'Drag & Drop PDF File' area and a note: 'Please upload the required document.'

At the bottom, there are three buttons: 'Save JSON' (Save your current proposal form content to a JSON file on your local disk), 'Download Draft PDF' (Preview a PDF version of your proposal based on your current form content), and 'Submit' (Send in the proposal. Ensure all required fields are filled before submission).

- **Proposal types**
 - Analysis of Roman WFI data
 - Most proposals accepted in Cycle 1 will likely fall into this category
 - New General Astrophysics Surveys
 - Up to 6 programs will be selected for a combined total of ~1200 hours
 - Observations will primarily be scheduled within the first 2 years of the mission
 - Theoretical and Laboratory Astrophysics Investigations
 - Analysis of Public Ancillary Data

- **Quick note about spectroscopy: pipeline needs imaging to process spectroscopic data**
 - May propose spectra only, for CCS fields where imaging is planned
 - Otherwise, images must be requested alongside spectra

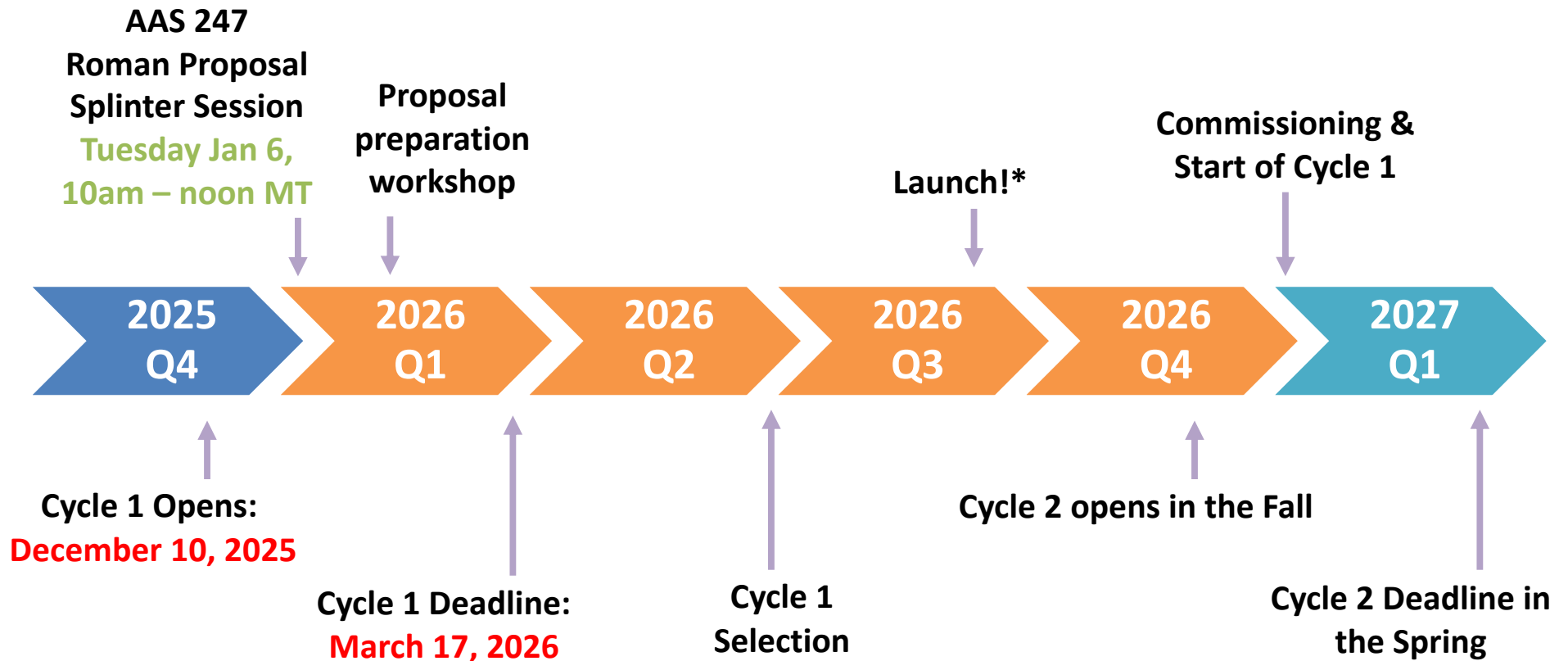
Roman Core Community Surveys (CCS)



- High-Latitude Wide-Area Survey
- Galactic Bulge Time-Domain Survey
- High-Latitude Time-Domain Survey
- Galactic Plane Survey

All Roman data have no proprietary period.

Cycle 1 Timeline



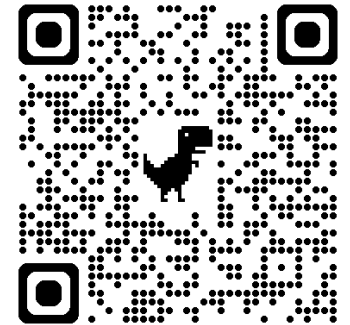
*Assuming September 2026 launch

Go Forth and Propose!



Call for Proposals:

<https://roman-docs.ipac.caltech.edu/roman-proposals-home/cycle-1-call-for-proposals>



Help Desk:

<https://stsci.service-now.com/roman>

- Because of the significant impact that ToO observations place on telescope scheduling, **no more than four ToO activations will be allowed in one year. Up to eight ToOs may be selected in Cycle 1.** It is expected that the time between a ToO activation and the execution of the ToO observations is **up to two weeks**, assuming the ToO observation does **not have a conflict with other constrained programs** planned for execution in the same timeframe. In cases where there is a conflict the PSO and the science centers will work with the PI to resolve it.



STScI | SPACE TELESCOPE
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

Preparing for the Nancy Grace Roman Space Telescope: The Roman Research Nexus

Roman Science Operation Center (STScI)

in collaboration with the Roman Science Support Center (IPAC) and the Roman Project Science Office (GSFC)

AAS 247 • Phoenix – January 4, 2026



What is the Roman Research Nexus?

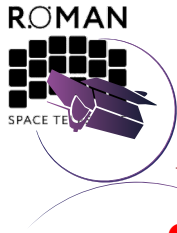
The Roman Research **Nexus is a cloud-based science platform** designed for Roman users. It provides:

- **Data–code proximity**
- **Pre-configured Roman environment + custom software support**
- **Notebook tutorials and end-to-end science workflows**

Supports:

- **WFI data simulation, calibration, visualization, and analysis**
- **Collaboration through teams and shared resources**

Note: This release focuses on WFI imaging. Expanded content will be introduced as the platform evolves.



Proposal Submission



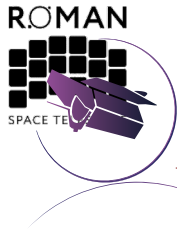
- A Science Justification PDF
- A Team Expertise document
- A file generated by APT that provides a detailed specification of Roman observations If requesting observing time

All proposals should be submitted to the Roman Science Support Center (SSC) at IPAC electronically, using the [RTPS proposal submission tool](#). Proposals must conform to all the requirements and constraints described in this Call, including the [Dual Anonymous Peer Review \(DAPR\) guidelines](#) for the Science Justification

Submission Policies

There is no limit to the number of Co-Investigators (Co-Is) that may appear on a proposal. **PIs based at a foreign institution can choose to designate a US-based co-PI for the administration of funding.** The **PI** may also designate a **Technical Contact** for purposes of communications about technical topics with the Roman science operations team.

There is no restriction on career level for who may serve as the Principal Investigator of a proposal. If the Principal Investigator is not eligible to administer funds at their institution, they must designate a co-PI for administration of funding.



Vision & Role of the Roman Research Nexus

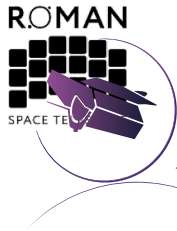


The Roman Research Nexus is designed to:

- Bring tools to the data (not the other way around)
- Enable scalable analysis for Roman-scale data volumes
- Support proposal preparation and feasibility studies
- Provide a reproducible environment for developing and testing Roman data analysis workflows
- Serve as a hands-on platform for learning Roman data products, software, and tools

The Nexus includes both the platform and its hands-on documentation;

RDOx provides mission-level reference documentation and Nexus policies.



Early Access Status

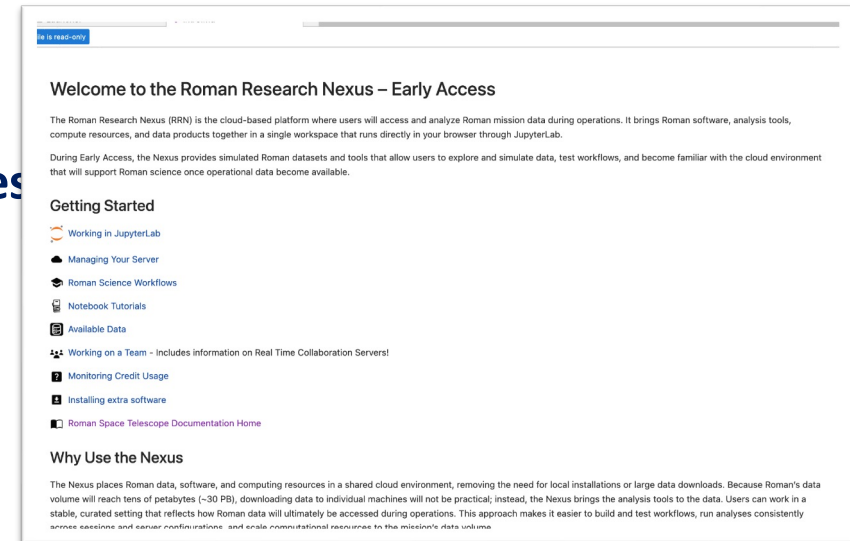
The Roman Research Nexus is now in Early Access public release.

What this means:

- Core functionality is available and usable
- Features and content will continue to evolve
- Feedback directly informs development priorities

What to expect today:

- A stable core platform
- Some features still under active development
- A focus on learning and exploration





Accounts, Credits, & Policies



Accounts

- Individual accounts are available to anyone with a MyST account
- Team accounts can be requested by any user and support collaborative work

Credits

- The Nexus uses a credit system to manage compute and storage resources
- Individual accounts receive credits for exploratory and learning purposes (pedagogical use)
- Team accounts provide additional resources, with credit policies enforced
- Credit usage can be monitored directly within the Nexus

Full account and credit policies are documented on [RDox Hub](#)





Roman Science Collaboration



Join the Roman Science Collaboration today!

[Join the RSC](#)

Goal: The goal of the Roman Science Collaboration (RSC) is to amplify the science returns from the Roman mission and the benefits of Roman science investigations to the astronomical community, by sparking collaborations and drawing on the creative insights and talents of researchers with complementary interests and expertise.

Membership Benefits: The RSC provides a framework and tools to support collaborative teams that may range from a handful of members to dozens or hundreds, depending on the scope of the investigations and the preferences of the team members. Key elements of the RSC are:

- Communication tools including a collaboration wiki, archived e-mail lists, a Slack workspace, and an index of projects and publications, accessible to all members of the collaboration.
- Science groups that support communication and collaboration across broad science areas, with Science Focus Groups on more specific topics.
- Projects expected to lead to one or more science publications or to produce tools to enable science investigations. Projects are announced to the collaboration through the project index. Project teams

RSC Governing Documents



Roman Science Groups:

- Exoplanets and Solar System
- Milky Way and Stellar Astrophysics
- Nearby Galaxies (<15 Mpc)
- Galaxy and Quasar Evolution
- Cosmology
- Explosive Transients

•discussion @wiki/slack
Signe up at

<https://outerspace.stsci.edu/spaces/RSCPUB/overview>