Chandra Director's Office (CDO)

CUC Meeting Report

CDO is comprised of the following:

- IT Specialists: Tara Gokas, Karla Guardado (until Sep 2022), Evan Tingle
- Scientists: Thomas Connor (since Sep 2022), Antonella Fruscione (split ½ time with SDS), Paul Green (½ time), Rodolfo "Rudy" Montez Jr.
- Director: Pat Slane

Overview

- Highlights of CDO Activities

- Report on Cycle 24

- Plans for Cycle 25

- Upcoming Events

- Helpdesk Statistics

- Food for Thought

Highlights of CDO Activities

- **Summer AAS Meeting**

  - Return to in-person booth in Pasadena, CA June 12-16th.

- **Peer Review**

  - Fully remote peer review held June 21-30th (more later).

- **Supernova Remnants and Their Progenitors**

  - Hybrid science meeting held August 16-18th at the CXC.

- **Staff Changes**

  - Two major changes in CDO staff in September.

- **NHFP**

Highlights of CDO Activities

Supernova Remnants and Their Progenitors

- Hybrid science workshop held August 16-18th.

- 75 presentations (9 invited talks, 40 contributed talks, 26 lightning talks)

- Over 50 in-person attendees, 160 unique zoom participants.

https://cxc.cfa.harvard.edu/cdo/snr2022/

Highlights of CDO Activities

NASA Hubble Fellowship Program

- Deadline for 2023 Fellows applications was Nov 3

- 2023 is the last year we expect pandemic-era eligibility extension to 4 years post PhD

- 457 compliant applications received for 24 awards

- 61 reviewers recruited for 7 panels using a new review rubric (also posted to the web)

- Leads are drafting response to 32 recommendations from NASA review

- Application review occurring 17-24 January 2023.

https://www.stsci.edu/stsci-research/fellowships/nasa-hubble-fellowship-program/announcement-of-opportunity/nhfp-selection-rubric

Highlights of CDO Activities

Staff Changes

- *Departure:* CDO IT Specialist **Karla Guardado**. We are grateful for all of Karla's contributions to Chandra and CDO over the 6 years. Search underway for replacement (will be split ½ time with SDS)

- *Arrival:* CDO Scientist **Thomas Connor**. Joined in September, previously a fellow in the NASA postdoctoral program at JPL & Caltech.

- *Future Position:* CDO Scientist search underway since **Paul Green** has transitioned to half-time.

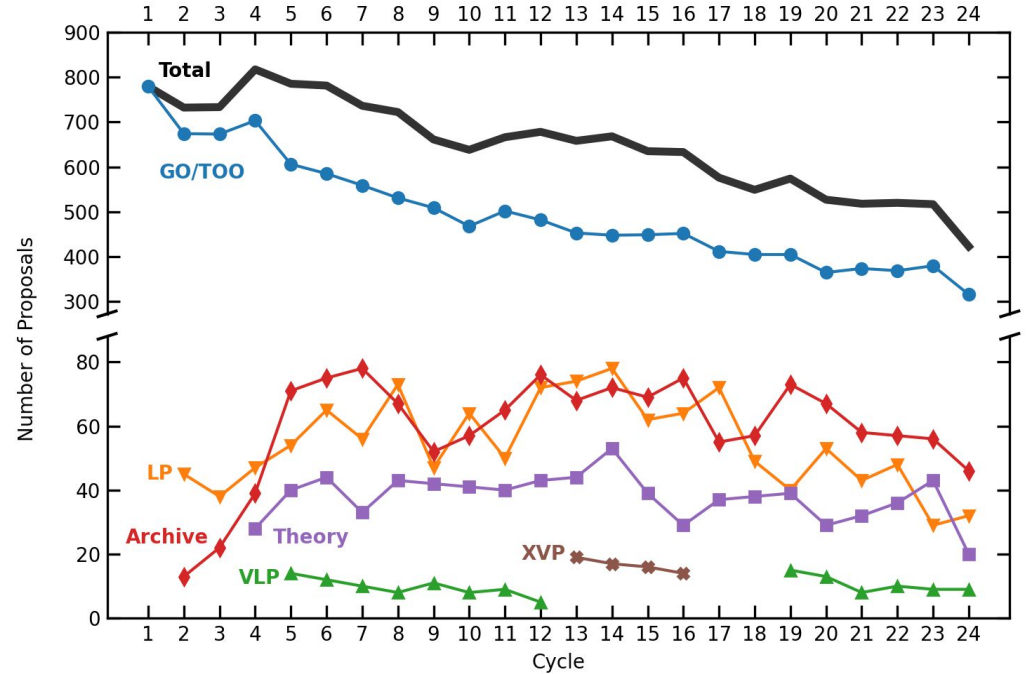# Cycle 24 Peer Review

Review Statistics

- Decline in number of proposals, driven by decreases in GO, Archive, and Theory.
- LP and VLP pressure remained steady.

	Cycle 23	Cycle 24
Total	517	**423**
GO (w/ TOO)	309 (380)	**254 (316)**
LP	28 (29)	**29 (33)**
VLP	9	**9**
Archive	56	**46**
Theory	43	**20**

Cycle 24 Peer Review

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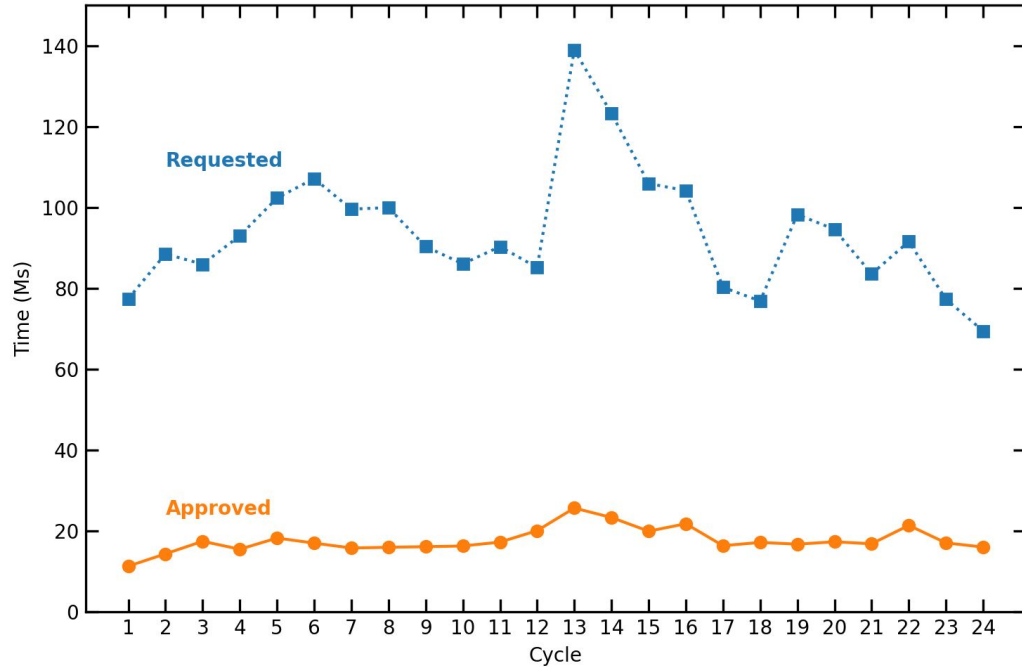
Cycle 24 Peer Review

Oversubscription by Time

- **Overall: 4.3**

  (Time Awarded: 16 Ms,

  Time Requested: 69 Ms)

  - **GO/TOO**: 3.0

  - **LP**: 5.9

  - **VLP**: 16.5

  - One VLP approved (1 Ms)

Cycle 24 Peer Review

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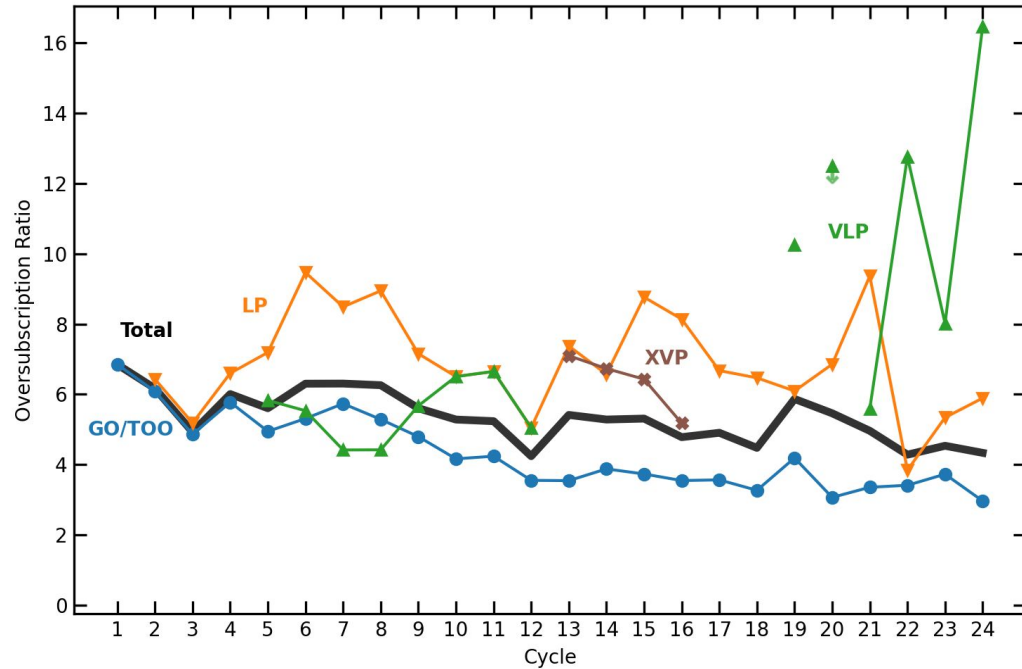 - **VLP**: 16.5

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Cycle 24 Peer Review

Oversubscription by Funds

for Theory and Archive

- **Archive**: 3.8

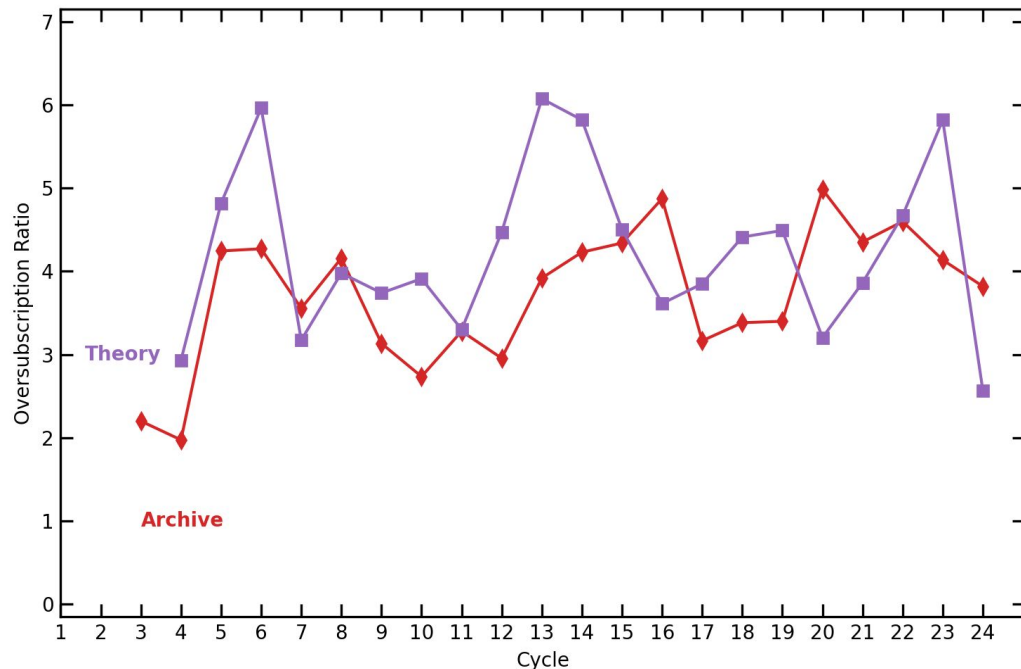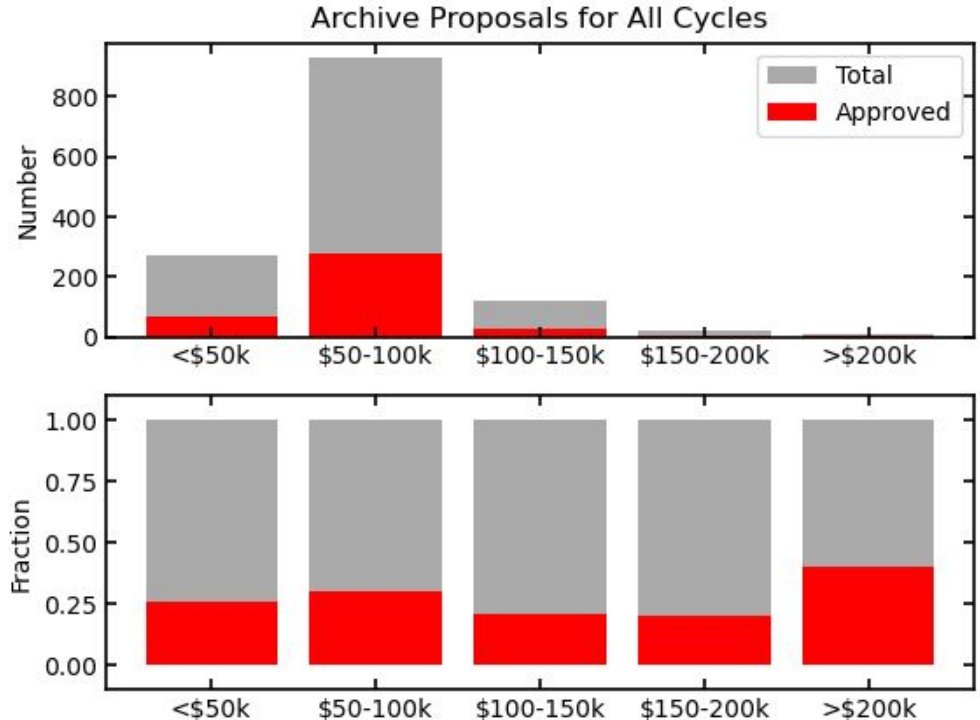 Request: $4.00 million

  Budget: $1.05 million

  Award: $1.04 million

- **Theory**: 2.6

  Request: $1.57 million

  Budget: $0.6 million

  Award: $0.61 million

Cycle 24 Peer Review

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Archive Proposals for All Cycles

Cycle 24 Peer Review

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Archive Proposals for Cycles 19-24

Cycle 24 Peer Review

Oversubscription by Funds

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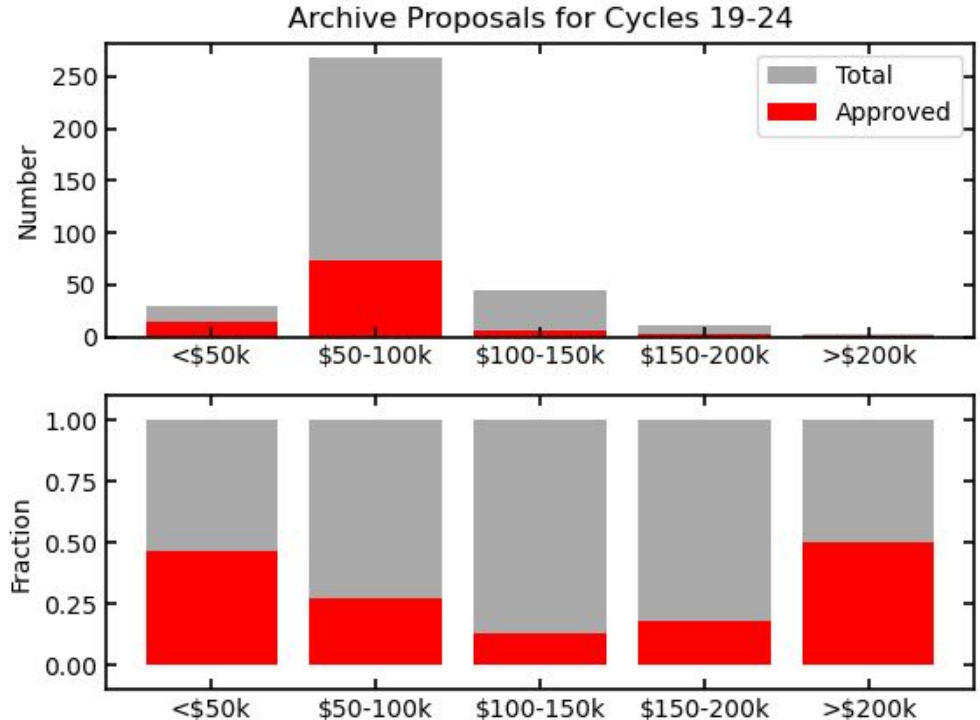
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Theory Proposals for All Cycles

Cycle 24 Peer Review

Oversubscription by Funds

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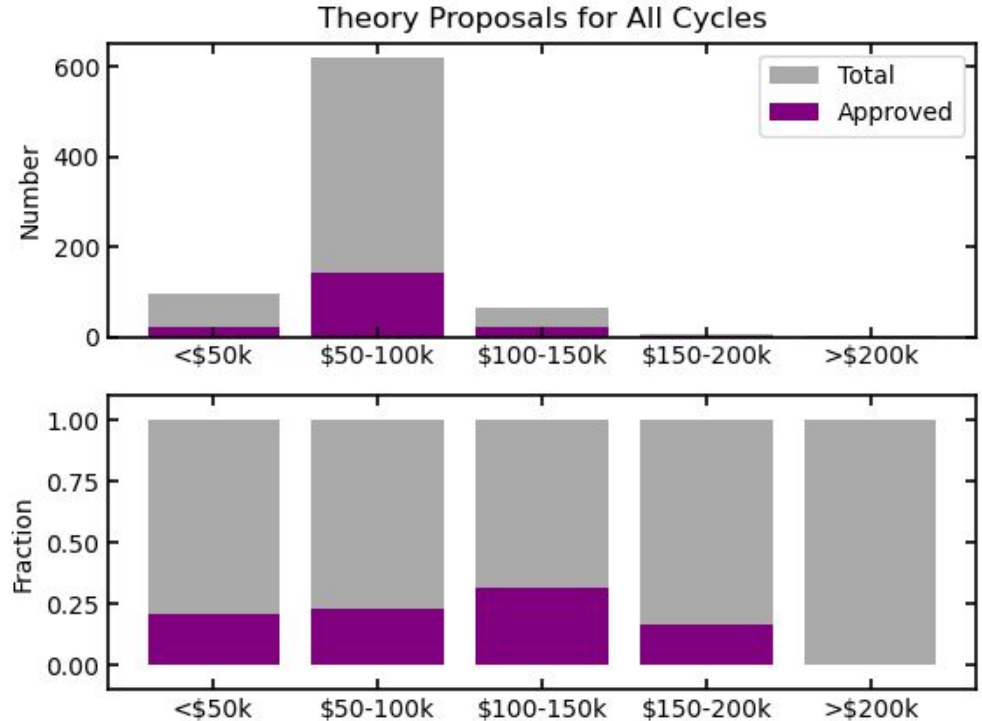
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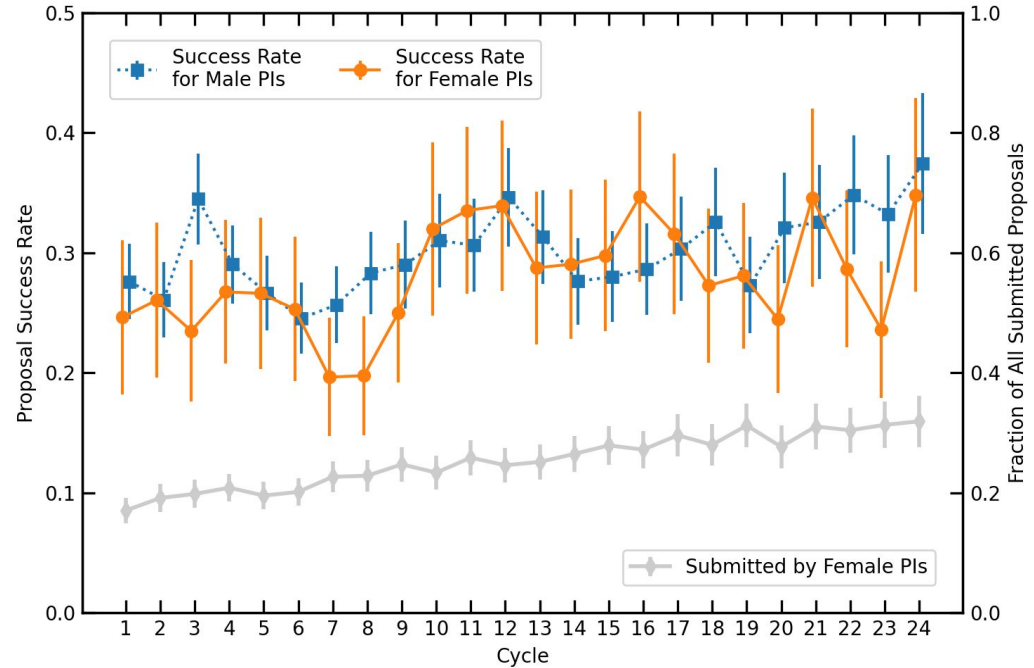 Budget: $0.6 million

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Theory Proposals for Cycles 19-24

Cycle 24 Peer Review

Proposer Performance

Since cycle 10, success rates for male and female proposers statistically indistinguishable.

Cycle 24 Peer Review

Dual-Anonymous Violations and Mitigation

- *Type 1*: proposals that did not use numbered references (Montez et al 2012 instead of [5]).
- *Type 2*: proposals that use "we", "our", etc. in the same sentence as a reference (any reference, numbered or named).
- *Type 3*: proposals that directly name the proposing team and/or institution.

Reviewers were asked to report suspected instances of DAPR violations to CDO members and/or their Panel Organizers.

Cycle 24 Peer Review

Dual-Anonymous Violations and Mitigation

- *Type 1*: proposals that did not use numbered references (Montez et al 2012 instead of [5]).
  - No penalty this cycle (new requirement).
    - **14 in Cycle 24**
  - Considering removal for non-compliance in **Cycle 25**.

Cycle 24 Peer Review

Dual-Anonymous Violations and Mitigation

- *Type 2*: proposals that use "we", "our", etc. in the same sentence as a reference (any reference, numbered or named).
    - Consulted with NASA HQ, it was determined that such violations would be deemed non-compliant and removed from consideration.
    - Each case was reviewed by CDO then a decision was made by Director.
        - **3 removed, 8 were non-issues with no penalty**
    - Considering using the same policy next cycle unless instructed otherwise.

Cycle 24 Peer Review

Dual-Anonymous Violations and Mitigation

- *Type 3*: proposals that directly name the proposing team and/or institution.
  - Each case was reviewed by CDO then a decision was made by Director.
    - **9 proposals** that directly named any member of the proposing team were deemed non-compliant and removed from consideration.
    - **3 proposals** that mentioned an institution in passing (i.e. in Budget Justifications) had no penalty in Cycle 24. Removal in **Cycle 25.**
    - **2 proposals** that alluded to work by an institution were sufficiently anonymized and/or unavoidable and had no penalty.

Plans for Cycle 25

Timeline

- 15 December 2022 - Call for Proposal and POG Release

- 15 March 2023 - Deadline for Proposals

- 20-30 June 2023 - Peer Review

Tentative Plans for Cycle 25

- Continue with ~4 Ms to Big Project Panel and remaining time to topical panels.
  - Note that additional time may become available if not all Joint Time allocated (+750 ks came back from HST in Cycle 24). Historically this allocated to the BPP due to high oversubscription ratio.
- Keep requirement for at least 1 Ms awarded to Very Large Project(s).
- High Ecliptic Latitude (HEL) time will continue to be limited.
- Joint Partner Observatories will have an allocation of HEL time and Resource Costs (no evidence for exceeding these limits in Cycle 24).

Tentative Plans for Cycle 25

- **New Joint Time agreement with JWST**
  - 150 hours of JWST observing time are available in Cycle 25.
  - 300 ksec of *Chandra* observing time is available for the next JWST Call for Proposals.
  - No more than one JWST Target of Opportunity (TOO) observation with a turn-around time shorter than three weeks.
- **Star Checker** is a web-based tool which allows a user to determine roll angles and dates that have suitable fields for guide star acquisition given a target and offset configuration. Stand-alone application is in final testing stages.

Upcoming Events

- 15 December 2022 - Cycle 25 Call for Proposals/POG Release

- 8-12 January 2023 - Winter AAS Meeting in Seattle, WA

- 17-24 January 2023 - NHFP Review

- 15 March 2023 - Cycle 25 Proposal Deadline

- 26-30 March 2023 - AAS HEAD Meeting in Hawaii

Helpdesk Statistics

Month	Opened	Closed	Active
September 2022	40	41	25
August 2022	37	39	22
July 2022	43	42	23
June 2022	40	36	20
May 2022	24	24	15
April 2022	38	41	15
March 2022	63	66	18
February 2022	46	53	16
January 2022	35	50	20
December 2021	32	23	33
November 2021	29	28	24

Food for Thought

- **Typical Commitments for Chandra Peer Review**

  Chairs (11 in total):

  - Preparation (30-50 proposals; 10-20 hrs)

  - 3-4 days of panel deliberations (5 hr a day; 15-20 hours)

  - 2-3 days of big project panel deliberations (5 hrs a day; 10-15 hours)

  - 1 BPP reading day (5 hrs)

    - **40-60 hrs (honorarium: $0)**

Food for Thought

- **Typical Commitments for Chandra Peer Review**

  Reviewers (75-100 in total):

  - Preparation (30-50 proposals; 10-20 hrs)

  - 3-4 days of panel deliberations (5 hr a day; 15-20 hours)

    - **25-40 hrs (honorarium: $0)**

Food for Thought

- **Typical Commitments for Chandra Peer Review**

  Panel Facilitators (11-13 in total):

  - Recruited from CXC/CfA community (increasingly difficult)

  - Pre-Review Software Training (8-16 hrs)

  - Pre-Review Meetings (1-3 hrs)

  - 3-4 days of panel deliberations (5 hr a day; 15-20 hours)

Food for Thought

- **Typical Commitments for Chandra Peer Review**

  Panel Organizers (4-5 individuals from across CXC)

  - Invitations (~20-40 each)

  - Organizational Meetings (6-8 meetings)

  - Proposal Assignments

  - Conflict Mitigation

  - Panel Orientation and Management

  CDO

  - General Organization, Implementation, and Oversight

Food for Thought

- **We have had 2903 unique PIs at Chandra PR (Cycle 1-24)**

- **We have had 1187 unique Reviewers at Chandra PR (Cycle 1-24)**
  - 236 Reviewers have never been a PI on a Chandra proposal (yet).
  - *951* PIs have participated as a reviewer at least once.
    - *More than ⅔ of Chandra PIs have not participated in a review* (that's 1952 PIs); some power Chandra users (100+ submitted proposals) have only participated in one or fewer PR.
  - Reviewer invitations are seldom 50% successful and often much worse.
  - Conflict mitigation is a difficult and can result in non-favorable conditions.

Is it time for a Distributed Peer Review?

- **ALMA's Distributed Review puts the onus of review on the proposers**
  - Each submitted proposal requires the proposing team provide 10 reviews of other proposals submitted to the call (with conflict mitigation).
  - Highest and lowest grades are removed, the remaining grades are averaged for the proposal's score on which GO selections are made.
  - Large programs are reviewed in a traditional panel.
  - Clear criteria and policy for reviewers and review conditions.
  - More information at: [ALMA's Site on Distributed Peer Review](https://almascience.nrao.edu/proposing/alma-proposal-review/distributed-peer-review)

Chandra Distributed Peer Review

In a distributed review we would still have Traditional Panels:

- Big Project Panel (3-4 5-hr long days)

  - Constructed solely of BPP pundits.

  - Charged with awarding time for LPs and VLPs.

  - Informed by reports and grades from Distributed Review.

- Time-Domain Panel (3-4 5-hr long days)

  - Constructed solely of TDP pundits.

  - Charged with awarding triggers/constraints/etc. and balancing science.

  - Informed by reports and grades from Distributed Review.

Chandra Distributed Peer Review

But aren't CXC/CfA proposers notoriously conflicted at PR?

- CXC/CfA proposers usually are not asked to serve due abundant conflicts in a panel of 30-40 proposals. But there are likely 10-20 proposals each CXC/CfA proposer could review without conflicts.
- In Cycle 24, we had 428 non-GTO proposals, only 48 were lead by folks from CXC/CfA [need to determine how many were Co-Is on the 428].