

***Chandra* Special Call for Proposals: Pathfinder Science for a potential *Chandra* Successor Mission (CSM)**

DEADLINE:

Wednesday 24 January 2018, 6PM EST.

Summary and Timeline

The *Chandra* X-ray Observatory (CXO) has enabled many ground-breaking discoveries because it is the first X-ray mission with sub-arcsecond imaging and spectroscopy. Requirements for a CSM include large gains in collecting area over current missions, coupled with high angular resolution and a large field of view. Lynx is one example of a potential CSM, and is one of four Large Mission concept studies funded by NASA in preparation for the 2020 Astrophysics Decadal Survey. See <https://wwwastro.msfc.nasa.gov/lynx/> for Lynx technical capabilities and top level science objectives.

The purpose of this special *Chandra* call is to propose for new *Chandra* observations that can demonstrate the feasibility for key CSM goals or otherwise enhance CSM science prospects. Proposals from all areas of astrophysics will be considered. It is anticipated that the results of these pathfinder studies will inform the CSM science case(s) to be considered by the 2020 Astrophysics Decadal Survey Committee. Up to 1 Msec of Director's Discretionary Time (DDT) may be devoted to CSM programs. Approved CSM Programs will be scheduled during Cycle 19 (calendar year 2018) as feasibility allows. Funding is available to eligible PIs/Cols at the same level as for General Observer Programs. Successful proposers will be allowed a full year of proprietary time for CSM targets.

No archive or theory funds are available for this Call. Archive and Theory Proposals that enhance CSM science lie within the scope of the *Chandra* Cycle 20 Call for Proposals. Approved CSM-related archive and theory programs will be funded early (fall of 2018) to enable investigators to complete their analysis in time to be used by the Decadal Survey Committee. Proposers should clearly identify CSM programs in the proposal abstract.

CSM Proposal Deadline	Wednesday 24 January 2018 6PM EST
CSM Proposal Review	14-16 Feb 2018
Selected CSM Proposals Announced	Week of 19 February 2018
CSM Cost Proposals Due	23 March 2018
CSM Programs start	Late February 2018

CSM Proposal Content and Evaluation

Proposals have a page limit of 3 pages for text and diagrams. A fourth page must list members of the proposing team and a brief plan which summarizes the project organization and demonstrates completion of the science analysis by August 2019.

Due to pitch angle constraints, no targets will be accepted for CSM targets that are situated above 60 deg or below -60 deg ecliptic latitude. No Very Fast, Fast or Medium Targets of Opportunity are available for this Call. Two Easy time constraints and one Average time constraint are available for CSM targets. Joint time is not available for the CSM program.

Proposals will be will be evaluated by a panel of reviewers including senior CXC staff, MSFC Project Science, and outside experts. Their recommendations will be forwarded to the CXC Director who will make the final selection. *The deadline for CSM proposals is Wednesday 24 January 2018, 6PM EST.* Results will be emailed to PIs and posted on the CXC website. Given the short time-scale for this review, no feedback in the form of comments or grades will be provided to proposing teams.

Proposals will be evaluated according to the following criteria:

- (1) Overall importance of the science to CSM
- (2) The potential of the proposed observations to better demonstrate the feasibility of CSM science goals or enhance the development and impact of CSM science.

Proposals should clearly describe how the requested observations benefit CSM science. Proposals should consider and describe any existing archival data, and demonstrate that new observations result in a significant enhancement of the results.

Resources for Proposers

Resources for Proposers can be found on the CXC Proposers page:

<http://cxc.harvard.edu/proposer/>

And detailed in the Chapter 8 of the *Chandra Cycle 20 Call for Proposals*.

<http://cxc.harvard.edu/proposer/CfP/CfP.pdf>

Proposal Submission Instructions

CSM proposals shall be submitted via the DDT Remote Proposal Submission (RPS) software:

http://cxc.harvard.edu/cgi-bin/RPS/Chandra_RfO_DDT/RPS.pl

The DDT RPS interface is designed for transient science (i.e. Targets of Opportunity). CSM proposers who are requesting a slow TOO should fill in the DDT forms in the usual way. All proposers (TOO and non-transient) should select “No proprietary Time”. The proprietary time for approved proposals will be updated to one year after the targets have been ingested into the *Chandra* Observation Catalog.

Proposers who are requesting time for non-transient targets should fill out the forms as follows:

. Enter “Not applicable” in fields for:

- Justification for this particular target
- Why can't the observation wait for the next *Chandra* CfP?
- If Transient, Likelihood of Detection, Duration and Recurrence of Transient Behavior
- Have you/Co-Is requested XMM DDT time for this/similar proposal?

Please enter “Slow” for response time and the proposal abstract in the “Science Justification” field. The TOO details should be entered as follows for non-transient targets:

- Is this a trigger target? = Yes
- Exact CXC start response window= 31
- Exact CXC stop response window=365.

Observing Policies

General observing policies given in Chapter 3 of the *Chandra* Cycle 20 Call for Proposals apply to CSM programs. These include:

- Who is eligible to propose and bilateral collaboration between the US and the People's Republic of China
- Proposal Confidentiality
- Policies Regarding Plagiarism
- Communication with PI/Observer
- Proprietary Time
- Duplicate Targets

Cancellation of the CSM Special Call

The CXC reserves the right to make no awards under this Call and/or to cancel this Call. The CXC, the Smithsonian Institution, and NASA assume no liability should the Call be cancelled or for anyone's failure to receive notification of a cancellation.