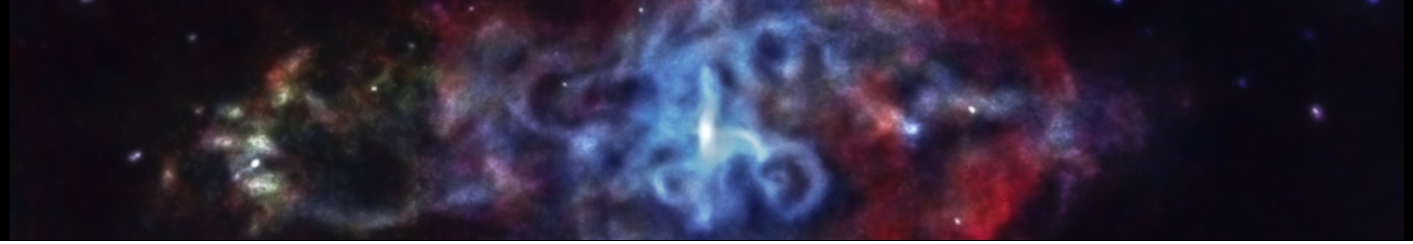


AGENDA

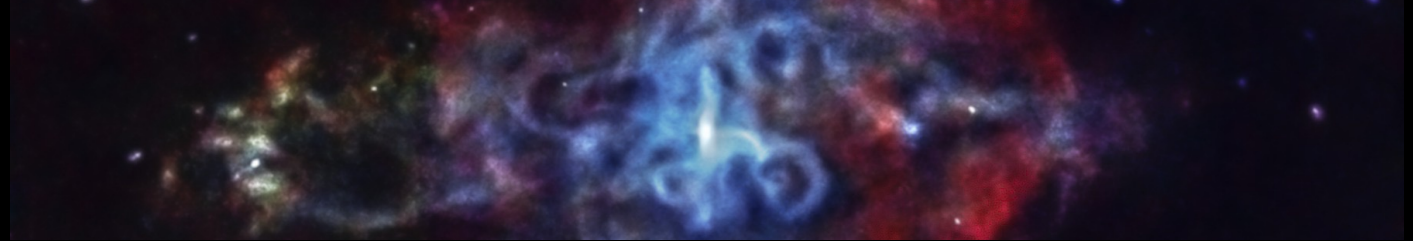
Director's Report

- Senior Review
- HRC Anomaly Status (Dan Patnaude)
- Time Domain Working Group Recommendations
- ACIS Warm Observations

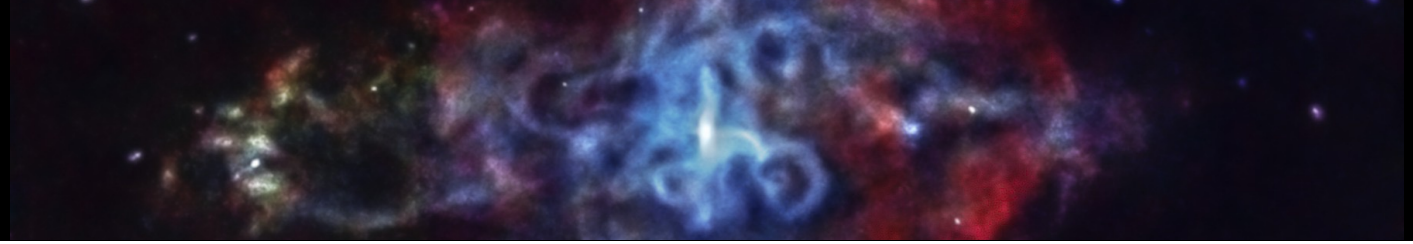
CDO Report

- Update on current Cycle 24 Submission statistics
- Plans for Cycle 24 Peer Review
- JWST/Chandra joint program

Concluding remarks and introduction of the new CUC Chair

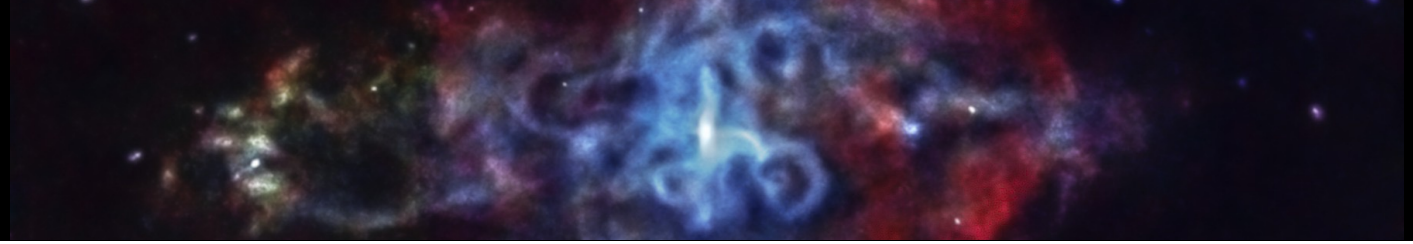


Director's Report



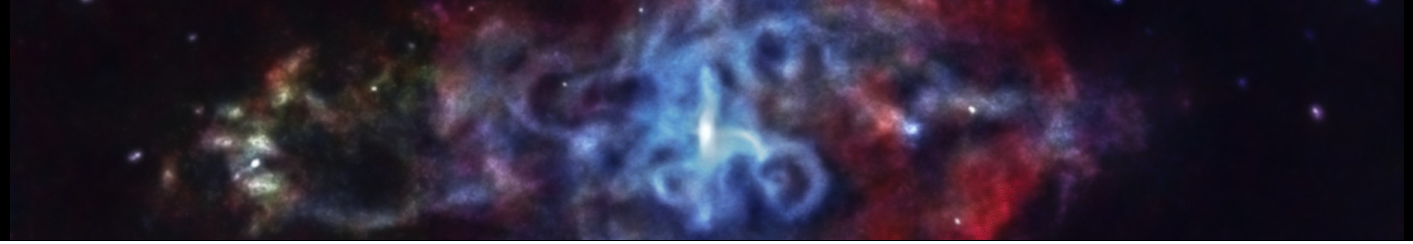
Quick Status

- Observatory functioning nominally except for HRC.
- Continued support of mission under COVID-19 restrictions proceeding successfully.
- Data processing and delivery functioning nominally.
- Since last CUC meeting, two spacecraft anomalies and one radiation event:
  - ACIS watchdog timer reset (1/16/22): benign SEU; 173.5 ks lost science time.
  - HRC Side-B Anomaly (2/9/22): under investigation; 777.3 lost time out of radzones (~700 ks science time)
  - Solar radiation event (4/28/22): 476 ks lost science time.
- Data reprocessing (Repro-V) complete. CSC2.1 processing began in April 2022. Running well.
- Cycle 24 proposal Cycle underway. (See CDO report)
- Senior review completed.



HRC Anomaly Status

Report by Dan Patnaude



HRC Anomaly Status

- Community advised to continue with submission of HRC proposals for Cycle 24.

- Barring any update establishing otherwise, peer review panels will be instructed to assume HRC will be operational in Cycle 24 when considering proposals.

  - HRC typically represents ~6-7% of observing time. If instrument cannot be brought back to functional state, those proposals will be dropped.
  - Lost observing time would present a manageable challenge for Mission Planning, possibly resulting in some increase in CCT usage during Cycle 24.

NASA Senior Review 2022

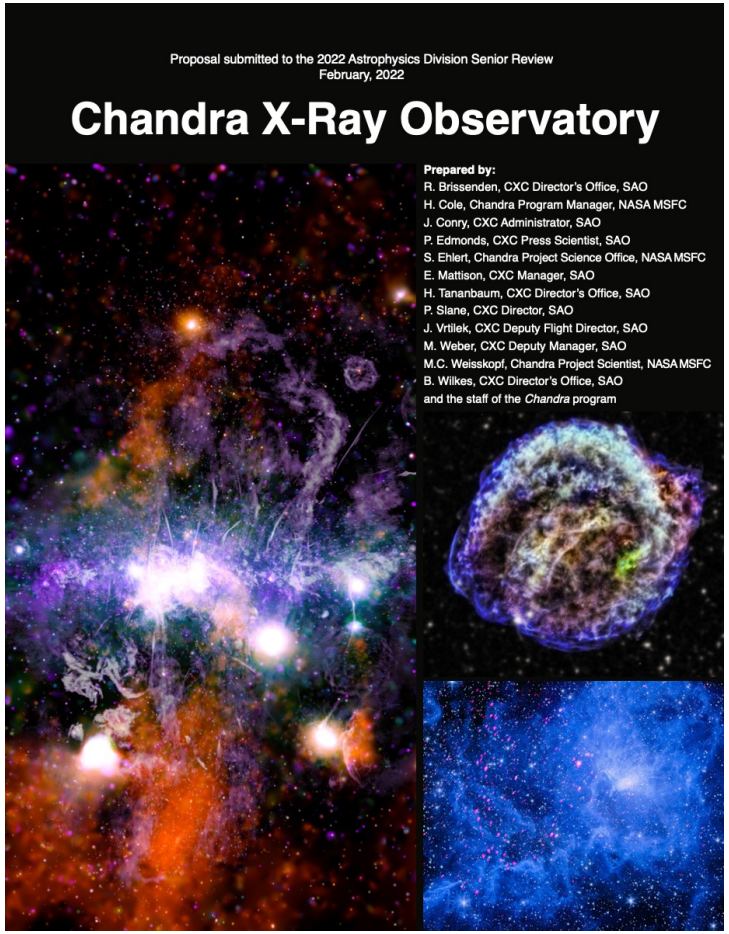
- The Senior Review assesses proposals for funding, usually involving additional resources in upcoming years, to continue operations of missions in the extended operations phase. Evaluation criteria: (1) scientific merit, (2) relevance and responsiveness to the Astrophysics Division's strategic goals, and (3) technical capability, management and science productivity given the costs.

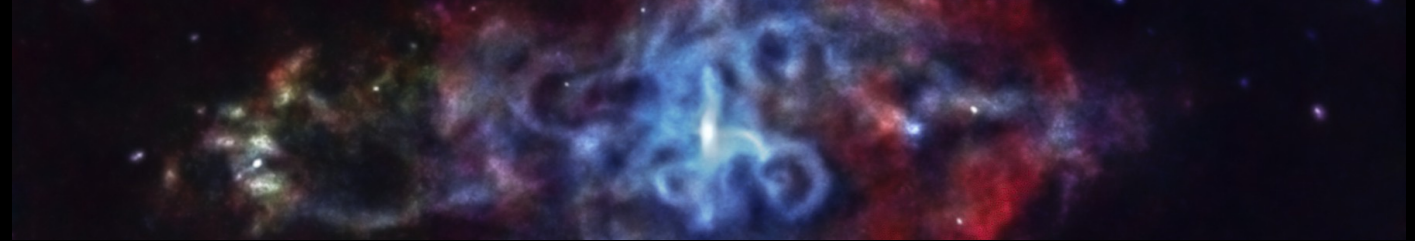
- Submitted 11 Feb 2022. Key requests were:

  - Funding profile with increases for inflation to maintain full existing staff plus two new FOT hires (one for developing code for "assisted scheduling," and one for overall engineering subsystem support, both required to support evolving operations complexity.
  - Funding for augmentations: (1) "CFaSt" diversity initiative; (2) Time Domain initiative for identification of transients in processing; (3) Increased GO support to adjust for inflation.

- Remote panel meetings held April 5-7. Excellent presentations and discussions.

  - Very favorable overall evaluation presented by to P. Hertz.
  - Panel reports get integrated into single set of recommendations to Astrophysics Advisory Committee. Awaiting final report and NASA decisions.





Chandra Time Domain Working Group Recommendations

- Request NASA resources to augment/maintain time-domain capabilities such as response to TOO/DDT requests and coordinated observations. [Requested in Senior Review proposal]

- Handle GW transient follow-ups by establishing observing strategy in advance through white paper call, and then allowing teams to propose for funding (e.g., through augmentation to archival category).

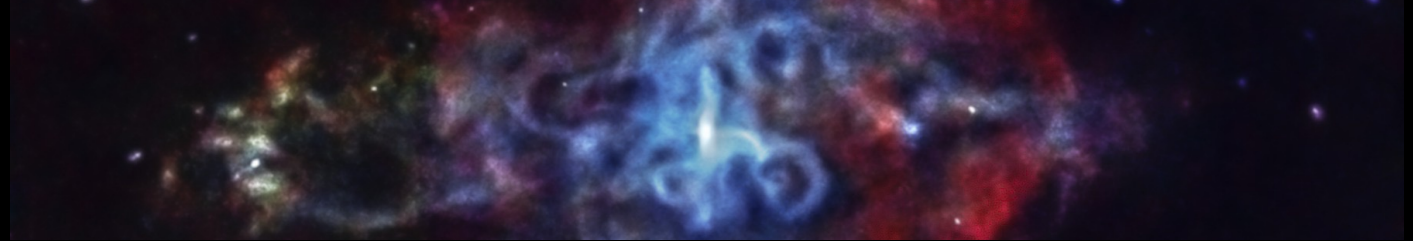
  - This requires study. An implication is that some number of GW transient follow-ups are automatically going to be approved. Impacts on TOOs, coordinated campaigns, non-transient science. Goal is for plan for Cycle 25.

- Clarify [or establish] to proposers and reviewers that there should be no advantage (e.g., augmentation of score) for proposals that request that data be made public immediately.

  - CUC input?

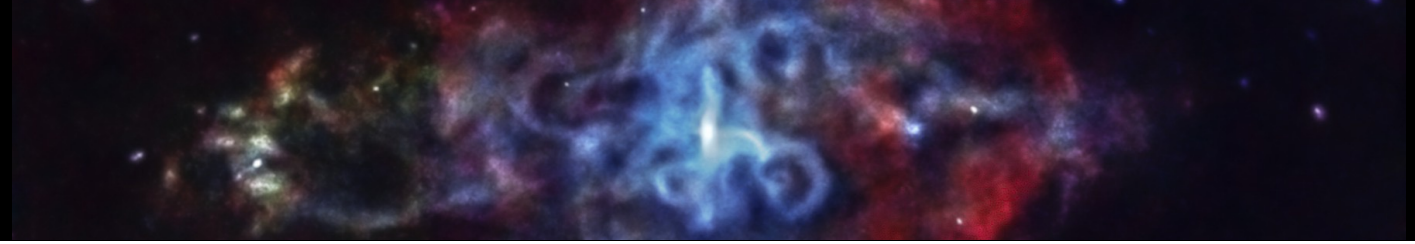
- Recommend CXC plan science sessions within workshops/meetings to focus on how to make time-domain observations with Chandra. Engage underrepresented communities for these sessions. [Planned for January 2022 AAS meeting, but canceled. Planned for June 2022 AAS meeting.]

  - Suggestions on targeting underrepresented communities at AAS meetings?



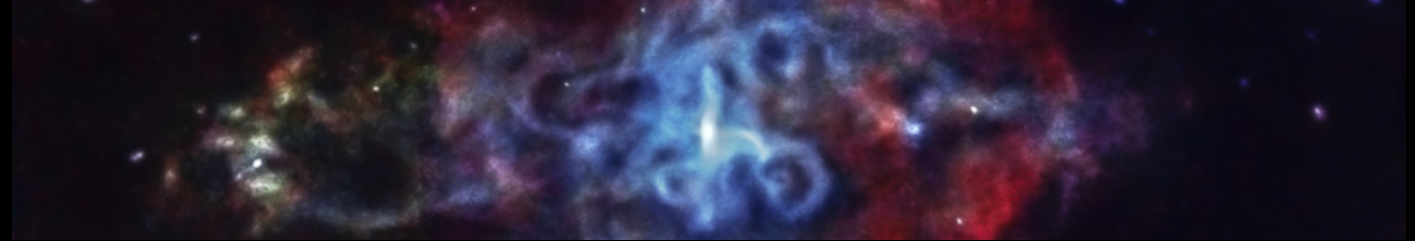
Chandra Time Domain Working Group Recommendations

- Recommend DDT program be retained and kept vibrant.
  - No plans to change this, but future initiatives requiring investments of large DDT allocations for non-transient science also under consideration. CUC input?
- Facilitate fast release of accurate X-ray positions and fluxes for transient events to provide for better and faster planning of other facilities. [Included augmentation for transient searches in Senior Review proposal.]
  - If approved, this will require discussion of exclusive use rights. Defer discussion until SR decision.
- Recommend prompting PIs of all proposals to search data for possible field transients and rapidly report results.
- Recommend retaining exclusive use periods, but encourage data sharing for groups interested in pursuing independent investigations with the same data.
- Recommend specific funding calls for early-career researchers, particularly for archival work or student-led work.
- Recommend allowing specification of Co-PIs on proposals to recognize contributions of multiple team leads and student PIs.



ACIS “Warmer” Observations

- Observing with ACIS at “tail-sun” attitudes results in warming of the detector focal plane, but is necessary to provide cooling for aspect camera and propulsion system.
  - ACIS energy resolution increases with increasing focal plane temperature, and calibration is not as accurate as for temperatures above -112°C (-111° C) for FI (BI) chips. Imaging is not impacted.
  - Many ACIS observations have little sensitivity to this effect (e.g., source-detection observations, observations with small number of counts, sources with continuum spectra, sources using HETG).
  - Currently, user-supplied source count rate and exposure times are used to identify proposed observations that do not have high precision spectroscopy as a science goal. For these observations on the S3 CCD, the focal plane temperature is allowed to get as warm as -109° C.



ACIS “Warmer” Observations

- These criteria are being broadened somewhat.
  - Temperature range for considering the focal plane to be “cold” is expanding from ≤118.7° C to ≤ -112° C (-111° C) for ACIS-I(S).
  - Observations that do not require a cold focal plane will be allowed reach temperatures up to -109° C for both ACIS-S and ACIS-I.
- Sensitivity question changed from “do you expect to analyze more than 2 resolved spectral lines?” to “do you expect to resolve any spectral lines?”
  - Captured in IPPS for Cycle 24, CPS for beyond.
- Require community visibility: should not perform spectral line fitting on warmer FP observations.
  - Listed in V&V reports.
  - Update science thread on filtering out warm data.
  - Other?