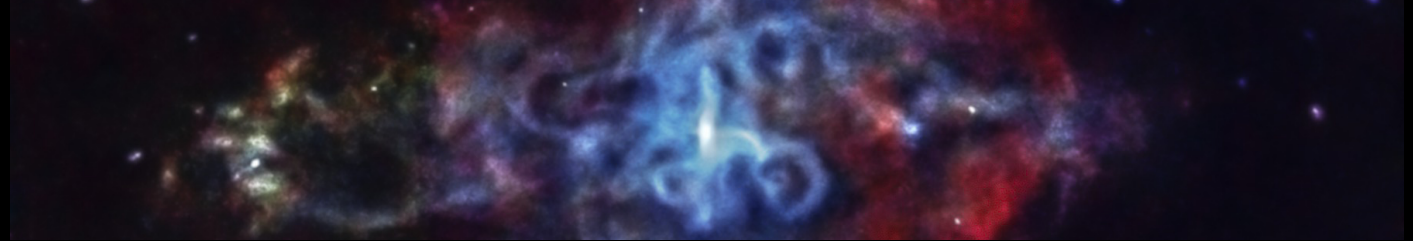
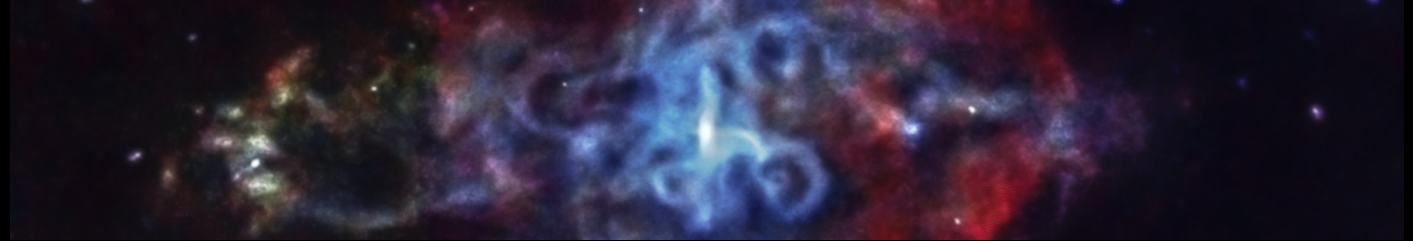
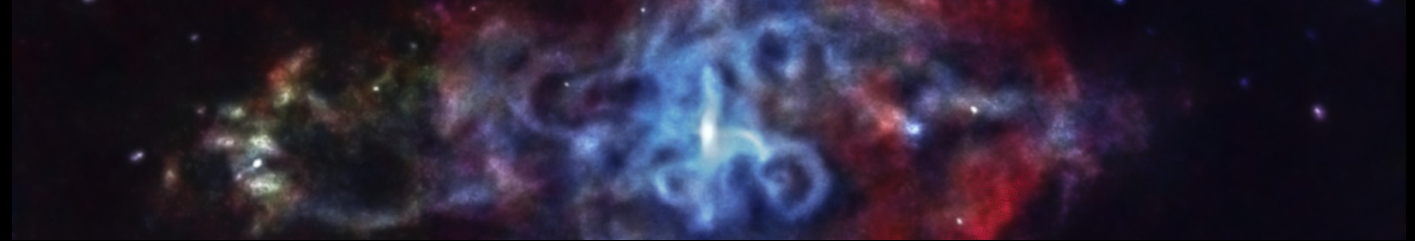


Director's Report



Quick Status

- Observatory functioning nominally.
- Continued support of mission under COVID-19 restrictions proceeding successfully.
- Since last CUC meeting, two spacecraft anomalies (LETG, IU) and one radiation event.
- Data processing and delivery functioning nominally.
- Data reprocessing (Repro-V) completing on schedule. CSC2.1 processing begins in ~March 2022.
- Cycle 23 Peer Review completed successfully. Cycle 24 Call for Proposals in preparation.
- Time-Domain Working Group recommendations received.
- Work underway on Senior Review proposal.



DDT Summary: 01 Oct 2020 - 06 Nov 2021

Cycle	Accepted Proposals	Accepted Time (ks)	Rejected Proposals	Rejected Time (ks)
22	21	632	11	382
21	6	185	3	138

Notes:

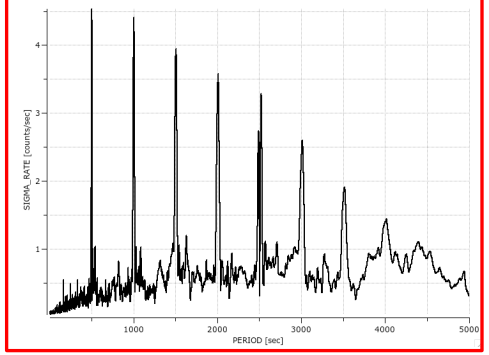
1: Rejected #s do not include informal requests that went untriggered.

2: Three non-transient programs were approved since 01 Oct 2020.

Chandra X-ray Center

DDT Summary: 01 Oct 2020 - 06 Nov 2021

New nova w/ pre-nova evidence for ~500s period, suggesting magnetized WD. Periodicity detected by HRC. Follow-up LETG observation shows rich spectrum.



BH binary in outburst, in high/soft state. 10x brighter than other sources in this state.

NS-NS merger candidate in field of A1795. Non-detection sets limits on small off-axis values.

Target	Classification	PI	t_r	t_a	SI	Grat	P
GRB210905A	SN, SNR AND ISOLATED NS	MARGUTTI	20	20	ACIS-S	NONE	N
IC 10 X-1	BH AND NS BINARIES	Binder	30	30	ACIS-S	NONE	N
ERO_TDE_1	ACTIVE GALAXIES AND QUASARS	Malyali	30	30	HRC-I	NONE	D
SN 2021aabp	SN, SNR AND ISOLATED NS	Ho	20	20	ACIS-S	NONE	D
EXO 2030+375	BH AND NS BINARIES	Pradhan	30	10	ACIS-S	HETG	D
GRB210704A	SN, SNR AND ISOLATED NS	Troja	20	20	ACIS-S	NONE	D
V1674 Her	WD BINARIES AND CV	Drake	30	30	HRC-S	LETG	N
TCP J18573095+1653396	WD BINARIES AND CV	Maccarone	10	10	HRC-S	NONE	N
4U 1543-475	BH AND NS BINARIES	Miller	30	30	ACIS-S	HETG	N
AT2019avd	ACTIVE GALAXIES AND QUASARS	Pasham	50	50	HRC-S	LETG	N
MAXI J1803-298	BH AND NS BINARIES	Diaz Trigo	150	75	ACIS-S	HETG	D
CXO J134856.4+263944	GRAVITATIONAL WAVE EVENT	Lin	60	60	ACIS-S	NONE	D
AT2020mrf	SN, SNR AND ISOLATED NS	Yao	40	40	ACIS-S	NONE	N
MAXI J1348-630	BH AND NS BINARIES	Carotenuto	30	30	ACIS-S	NONE	D

t_r = requested (ks)

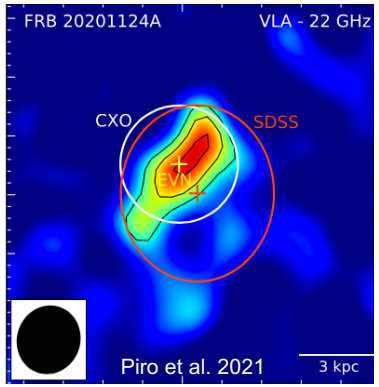
t_a = approved (ks)

P = proprietary
N=None
D=Default

Cycle 22

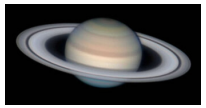
Cycle 21

Counterpart in SFR suggests magnetar origin for FRB



New ULX in NGC 4945. Chandra position rules out nearby near-IR source as counterpart. Search for optical counterpart underway.

Search for emission or variability as planet enters and exits Jupiter's "flapping" magnetotail. Not detected.



DDT Summary: 01 Oct 2020 - 06 Nov 2021

Target	Classification	PI	t_r	t_a	SI	Grat	P
NGC 4151	ACTIVE GALAXIES AND QUASARS	Miller	50	50	ACIS-S	HETG	D
FRB20201124A	SN, SNR AND ISOLATED NS	Piro	30	30	ACIS-S	NONE	D
ASASSN-20hx	SN, SNR AND ISOLATED NS	Mandal	2	2	HRC-I	NONE	N
Swift J130456-493158	BH AND NS BINARIES	Brightman	10	10	ACIS-S	NONE	N
ASKAP J173608.2-321633	SN, SNR AND ISOLATED NS	Kaplan	25	25	ACIS-S	NONE	N
GRB 190610A	GRAVITATIONAL WAVE EVENT	Tohuvavohu	25	25	ACIS-S	NONE	N
Cen X-4	BH AND NS BINARIES	in 't Zand	100	40	ACIS-S	HETG	D
PKS 1127-14	ACTIVE GALAXIES AND QUASARS	Siemiginowska	15	15	ACIS-S	NONE	D
GRB201214B	SN, SNR AND ISOLATED NS	Troja	50	50	ACIS-S	NONE	D
ESO253-G003	ACTIVE GALAXIES AND QUASARS	Payne	60	60	ACIS-S	NONE	D
SGR 1830-0645	SN, SNR AND ISOLATED NS	Kouveliotou	10	5	ACIS-S	NONE	N
Saturn	SOLAR SYSTEM AND EXOPLANETS	Weigt	100	30	HRC-I	NONE	N
AT2019wey/SRG	BH AND NS BINARIES	Kulkarni	25	25	ACIS-S	HETG	N

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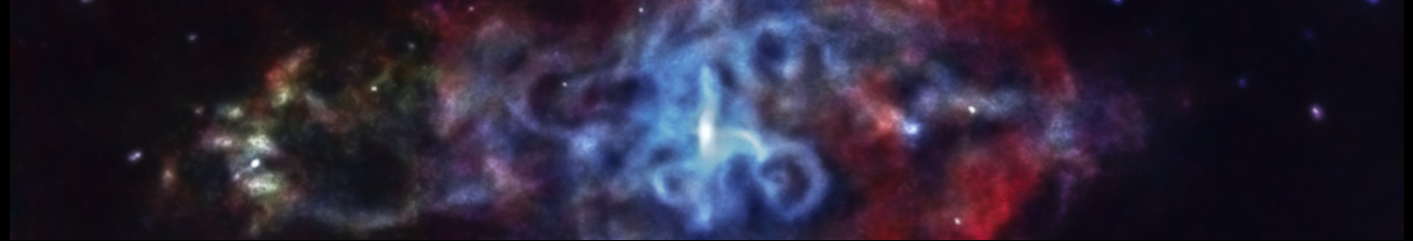
t_a = approved (ks)

P = proprietary
N=None
D=Default

Cycle 22

Cycle 21

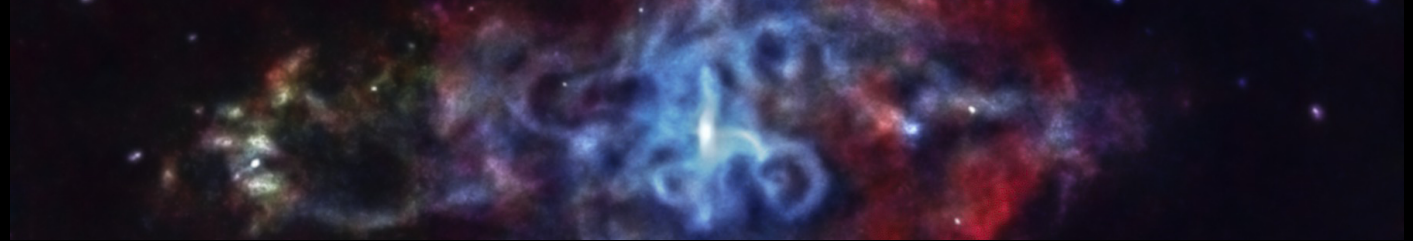


Chandra Time Domain Working Group

The TDWG was convened with the charge of reviewing and evaluating how Chandra serves the community of users that make time-domain and time-constrained observations.

Co-Chairs: Jon M. Miller (University of Michigan), Rodolfo Montez (SAO/CXC)

Members: B. Cenko (NASA/GSFC), G. Chartis (Charleston), Nathalie Degenaar (Amsterdam), Wen-fai Fong (Northwestern), Daryl Haggard (McGill), Thomas Maccarone (Texas Tech), Rachel Osten (STScI), David Pooley (Trinity), Enrico Ramirez-Ruiz (Santa Cruz), Nanda Rea (CSIC Barcelona)

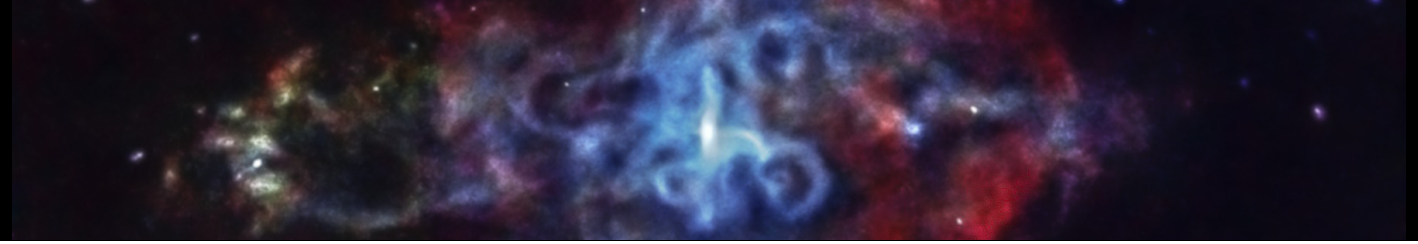


Chandra Time Domain Working Group

The full TDWG report is under review and will subsequently posted and provided to the CUC. **The following are preliminary points.**

Important conclusions:

- *"Within the limits of the data, we find that the scientific areas that participate in time-constrained observations are all served well by current Chandra policies and procedures."*
- *"The process appears to be equitable in that proposal success is proportional to proposal pressure."*
  - There is no clear evidence that any scientific area is "shut out" by current policies and procedures.
- *"For [certain] topics, the fast Chandra release of any possible information that might allow a better and faster planning of other facilities should be envisaged."*



Chandra Time Domain Working Group

A Subset of Specific Recommendations for immediate CUC input:

- *"If additional resources would help to augment (or even maintain at the current level) [capabilities for time-domain observations] in future cycles,* ***the TDWG urges the mission to request such support in upcoming NASA reviews."***

  - This is important for the upcoming Senior Review.

- *"We recommend that GW transient follow-ups be handled in a special manner… decided in advance by an anonymous peer review of white papers from the community."*

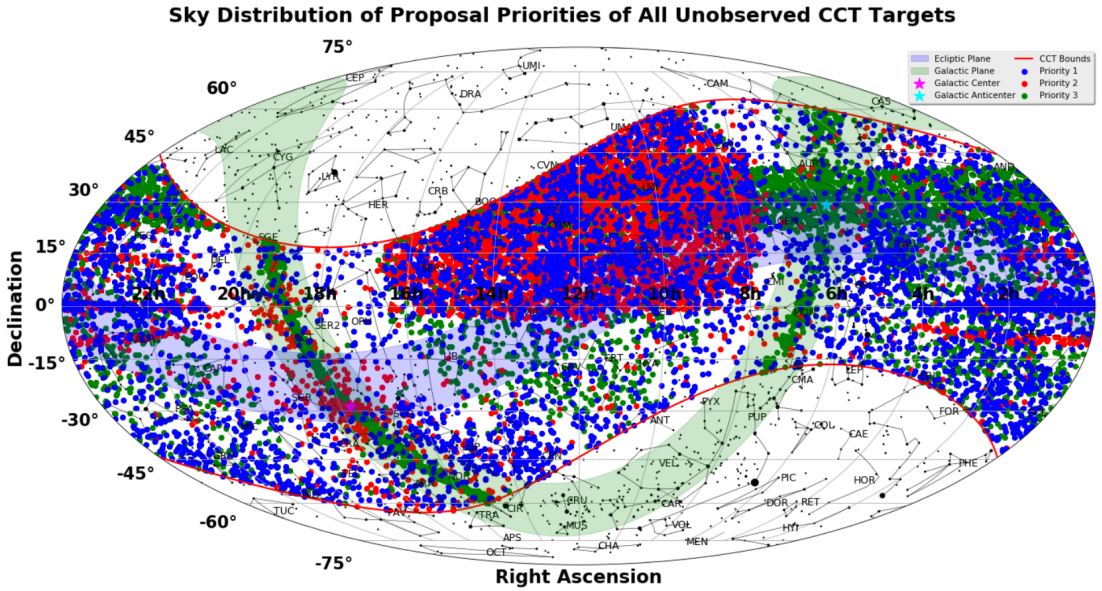
  - Individual teams propose for funding to analyze data. (Too late to implement in Cycle 24.)

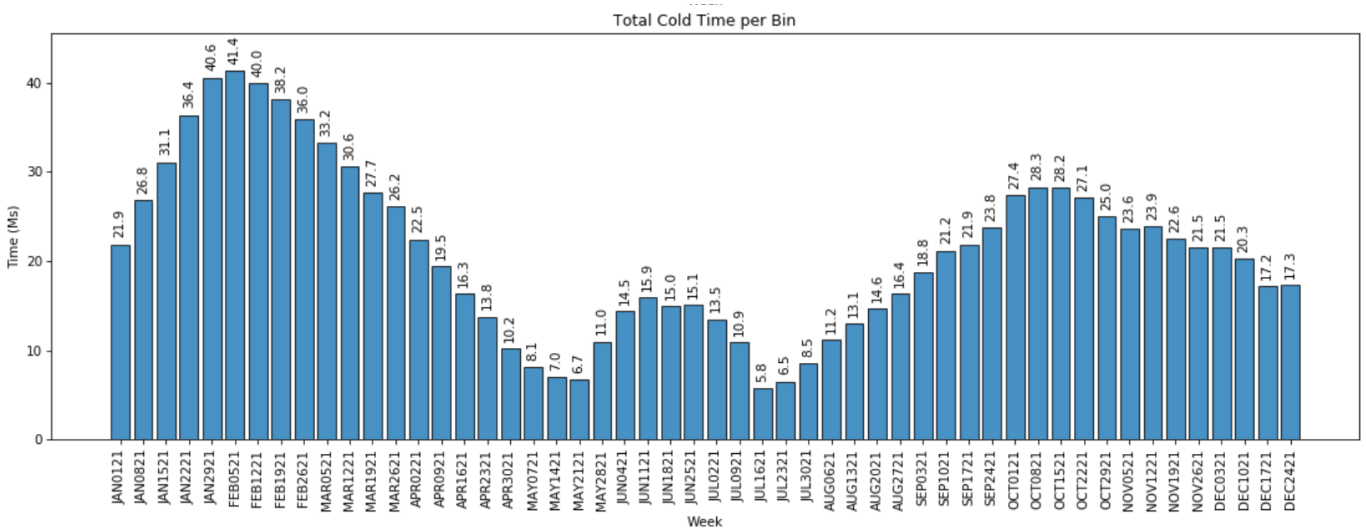
- *"We recommend that the mission plan sessions within workshops and larger astronomy meetings to focus on how users can make time-domain observations with Chandra."*

- *"The PIs of all proposals should be encouraged to search in their data on possible field transients and to rapidly report results, or to grant permission to… CXC to search for the data as quickly as possible."*

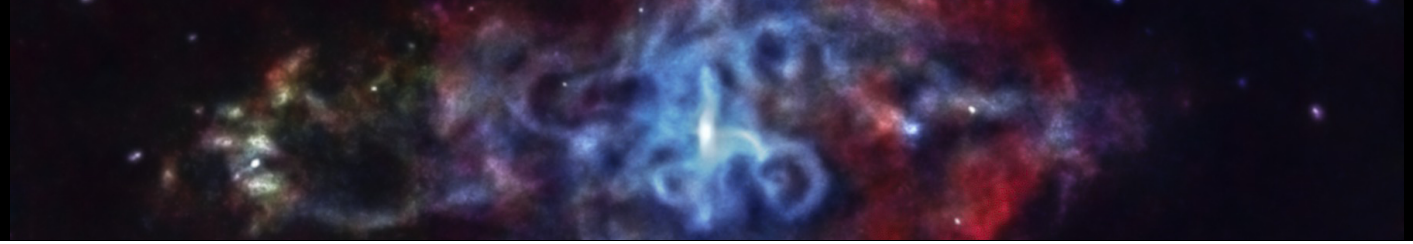
  - Potential solution is transient detection in standard processing. Details, including proprietary questions, need work.

Chandra “Cool” Targets (CCT)





- The pitch-angle sensitivity of the Chandra spacecraft components has evolved with time, and differs for ACIS and HRC.
- CCT catalog needs enhancement: More complete sky coverage, shorter observations, more HRC observations.
  - Anticipate a white-paper call for new observations that satisfy the above. Timing and details under consideration.
- Current programs still viable, though under review with regard to exposure times and current level of completion.



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.

  - Proposals due 11 Feb 2022.

- 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.

- Separate panels for Chandra, HST, SOFIA, and "Rest-of-Missions"

- Internal schedule circulated to science and technical teams. Draft proposal to CUC Chair for review on 17 Dec 2021 (thanks Bret!)

- Items under discussion for new or enhanced efforts. Recommendations from CUC solicited.