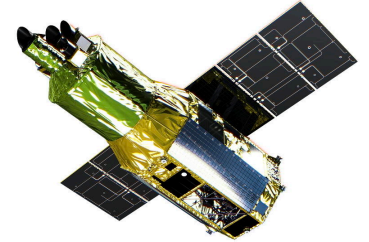


XRISM Guest Observer Facility



- ~4.5 FTEs, led by Mukai. Current staff consists of **Boettcher**, Hamaguchi, Ogorzalek, Tumer, Yukita.
- Responsibilities include:
 - Providing ongoing primary source of [English-language documentation](#) about XRISM for the world-wide community, including Proposer's Observatory Guide, ABC guide for data analysis, and XRISM website
 - Interfacing with Science Data Center, instrument teams, and in-flight calibration team, providing ongoing testing of pipeline software and up-to-date calibration and response files for the astronomical community
 - Organizing and running [XRISM Community Workshops](#). Three hybrid 2.5-day data analysis workshops held already, all at UMD Riggs Alumni Center and online. More planned.
 - Organizing and running [XRISM Proposal Review](#) for US and Canadian proposals, which is held in person, with 5 panels. For Cycles 1, 2, and 3, XRISM received 144, 163, and 170 proposals, respectively, from the US and Canada. Proposals from elsewhere are handled by JAXA and ESA calls. GOF lead attends international merging meeting with PS and PI.
 - Interfacing with other missions for which there is joint time available. XRISM currently has agreements with NuSTAR, XMM-Newton, Swift, and IXPE.
 - Answering questions to XRISM help desk email
 - Community outreach at various astronomical meetings

XRISM GOF: Documentations

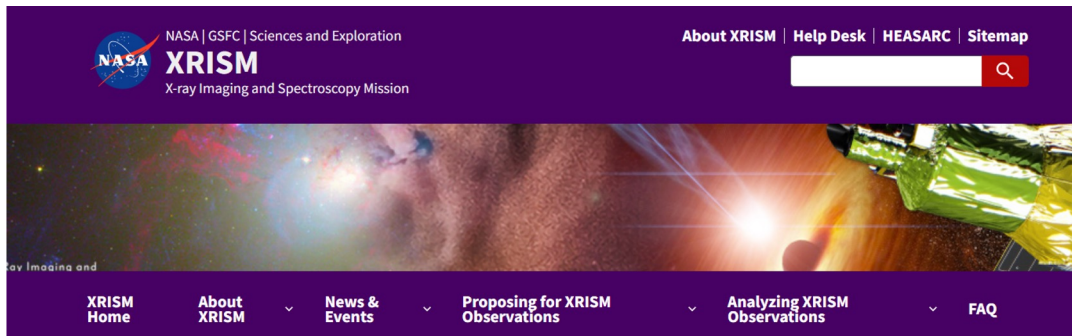


- Data analysis guide (the ABC guide)
 - Version 1.0 was published in 2024 November.
 - Many substantive updates in software and calibration have accumulated since then; users must currently check “Things to Watch Out For” and other web pages for updates.
 - A major revision of the ABC guide is underway, led by Hamaguchi
- Proposers’ Observatory Guide (“POG”)
 - Revised and updated every proposal cycle
 - Cycle 3 version included information on joint observations.
 - New chapter introduced intended as a practical guide for simulation of extended source observations
- New stand-alone documentation on Spatial-Spectral Mixing (SSM), to collect essential background for both proposers and XRISM data analysis
 - Based in part on the old chapter of the POG on SSM, which focused more on explaining what SSM is
 - Includes analysis guide for sub-array analysis with SSM considerations
- **Feedbacks on the new extended source feasibility chapter** of the POG (Chapter 7) and beta-readers for the new standalone SSM guide would be welcome (Contact Tumer)

XRISM Resolve Spatial-Spectral Mixing Guide

1 Observations of Extended Sources	2
1.1 Challenges of analyzing extended sources	2
1.2 Facing the challenge: methods and prospects	6
1.3 Consequences and general considerations	9
2 Analysis Guide	13
2.1 Spectral Extraction	13
2.2 RMF Generation	15
2.3 ARF Generation	16
2.4 Spectral Fitting	18
2.5 Method 1: Standard Procedure	19
2.6 Method 2: Using XSPEC <code>crossarf</code>	22

In progress: new website, more analysis guides



General Observer (GO) Program

Program Overview

i XRISM is a collaborative mission between ISAS/JAXA and NASA/GSFC, with contributions from over 70 institutions in Japan, the U.S., Canada, and Europe. PIs affiliated with institutions in U.S. and Canada should submit their observing proposals to NASA (this page); those affiliated with institutions in ESA member countries should [submit their proposals to ESA](#) while others (PIs in Japan as well as PIs whose affiliations are not in US, Canada, or ESA member countries) should [submit their proposals to JAXA](#).

XRISM solicits General Observer (GO) proposals from the general scientific community. NASA is responsible for allocating the U.S. and Canadian share of XRISM observing time, soliciting via NASA's [DOSES](#) grant solicitation process. Proposals may be submitted by both U.S. and

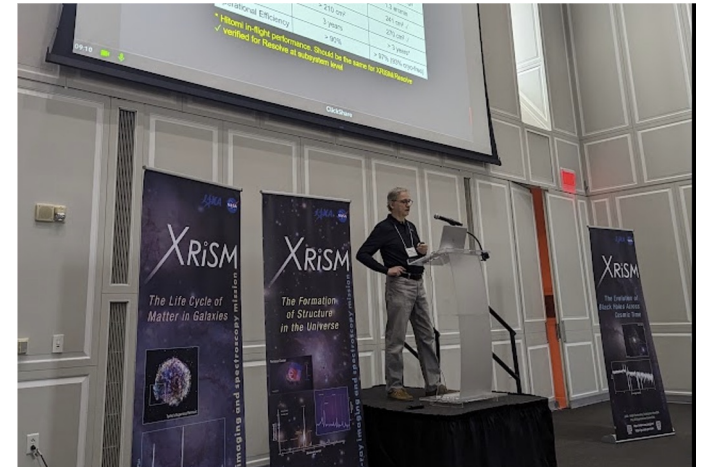
General Observer (GO) Program Overview

[Program Overview](#)[How to submit a proposal](#)[Current Cycle Important Dates](#)[Observational Proposals \(Type 1\)](#)[Theoretical/Experimental Proposals \(Type 2\)](#)[Observatory Information](#)[Proposer Tools](#)

- New website with easier and cleaner navigation is underway
- More analysis guides:
 - How to create ARFs for sub-array and off-axis pointings
 - How to create grade-resolved spectra/responses
 - **Question: topics you'd like to see better explained**
 - **Question: what is the best format? E.g. website tutorial, jupyter notebook, pdf document...**
 - Jupyter notebooks as part of the Fornax initiative

XRISM Community Workshops

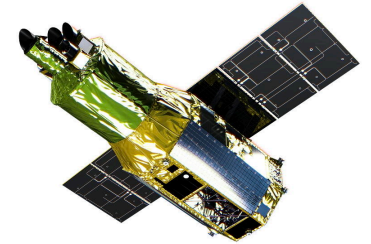
- Three so far (2023, 2024, 2025):
 - ~1/3 grad students, ~1/3 postdocs, 1/3 senior
 - 2023: 54 in person, 77 virtual registered
 - 2024: 70 in person, 158 virtual registered
 - 2025: 40 in person, 185 virtual registered
 - Typical attendance: ~30-40 in room + ~60-100 online
- Typical agenda:
 - Overview of XRISM mission and instruments
 - Lectures and hands-on tutorials on data reduction
 - Lectures and hands-on tutorials on proposals and simulations for proposals
- **Feedback welcome on:**
 - **Content**
 - **Format (for now hybrid)**
 - **Scope**



New idea: X-ray spectroscopy school

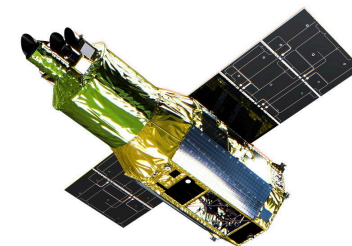
- Aim: to teach people with and without X-ray experience **what** can be learned from high spectral resolution X-ray data and **how** to obtain this information
- What exists or existed:
 - X-ray Astronomy School, last one over a ~decade ago, organized jointly by GSFC and CfA
<https://heasarc.gsfc.nasa.gov/docs/xrayschool/>
 - AtomDB workshop: ~annual, talks by experts on atomic data, lab astro, plasma codes (no “school” component)
<https://www.atomdb.org/Meetings/2020/index.php>
 - In Europe, AHEAD2020 high resolution X-ray spectroscopy school (closest to what we have in mind)
<https://webserver.javalab.ua.es/ahead2020/schools/ahead2020-high-resolution-x-ray-spectroscopy-school>
- Potential Elements:
 - Intro lectures on what is X-ray astronomy for non X-ray astronomers (who could e.g. start a day early)
 - Lectures on physics, e.g. what is collisional plasma, what can be learned from spectral lines, what is radiative transfer
 - Hands-on tutorials: already prepared spectra and responses, and analyzing spectra together, perhaps parallel for different science topics
 - Talks/tutorials on spectral fitting and model software
- Feedback welcome on:
 - Is it worth starting regular X-ray spectroscopy school?
 - If so, what is the best format?

XRISM GOF: Proposal Cycles



- Organizing and running XRISM Proposal Review for US and Canadian proposals, which is held in person, with 5 panels.
 - High workload on the GOF over the past year, due to the shortened duration (6 months) of Cycle 2 observations
 - Following the Cycle 3 deadline on February 27, 2026, the in-person Cycle 3 peer review has been organized for April 29-May 1, 2026
 - In addition, a modest amount of XRSIM observing time has been made available to several partner observatories (XMM-Newton, IXPE, Swift, and NuSTAR); GOF support those of US-led missions from technical and policy descriptions on their call for proposals, design of XRISM-related items in the ARK/RPS forms, through (XRISM) joint proposals that are submitted
- GOF stands ready to support future evolution of XRISM proposal calls – some changes are easier to support, while others may require a substantial preparatory work on the side of the GOF
 - Key Projects/large proposal type category?
 - Further expansion of joint observation proposals?
 - ...any other possibilities?

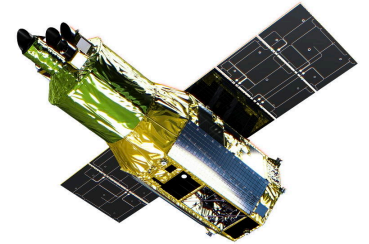
XRISM GOF: Proposal stats



	Cycle 1	Cycle 2	Cycle 3
Available US Time	4818 ks	2891 ks	5782 ks
No. of Type 1 Proposals	144	163	170
No. of Type 2 Proposals	6	4	3
Total time request	27097 ks	27635 ks	38977 ks
Oversubscription	5.6	9.6	6.7
Canadian PI Proposals	11	11	7
Joint with NuSTAR	N/A	N/A	16 (2610 ks)
Joint with XMM	N/A	N/A	3 (145 ks)

- ❖ 92 or 170 Cycle 3 proposals appear to be resubmission of Cycle 2 proposals
- ❖ XMM-Newton AO-25 approved one proposal (on 4U1254-69) with joint XRISM time
- ❖ IXPE Cycle 3 approved on proposal (on Her X-1) with joint XRISM time
- ❖ NuSTAR Cycle 12 will approve 4 proposals with joint XRISM time

XRISM GOF: Suzaku Key Projects



- Suzaku solicited Key Project proposals starting with Cycle 4, which may serve as a template for XRISM Key Projects
 - “comprehensive observing programs sampling a number of objects of a particular class, or surveying a large region of the sky, in order to take maximal advantage of the unique attributes of Suzaku to address important astrophysical problems”
 - 2 Ms were made available annually; individual proposals could request up to 1 Ms.
 - Suzaku Key Projects could be multi-year when necessary
 - International teams were encouraged
 - Data were immediately public
- Sample Key Projects:
 - AGN Spin measurements (PI: Chris Reynolds)
 - A deep observation of Kepler SNR (PI: Sangwook Park)
 - Virgo outskirts (PI: Aurora Simionescu) (also Perseus and Coma)
 - Solar Wind Charge Exchange (PI: Massimiliano Galeazzi)