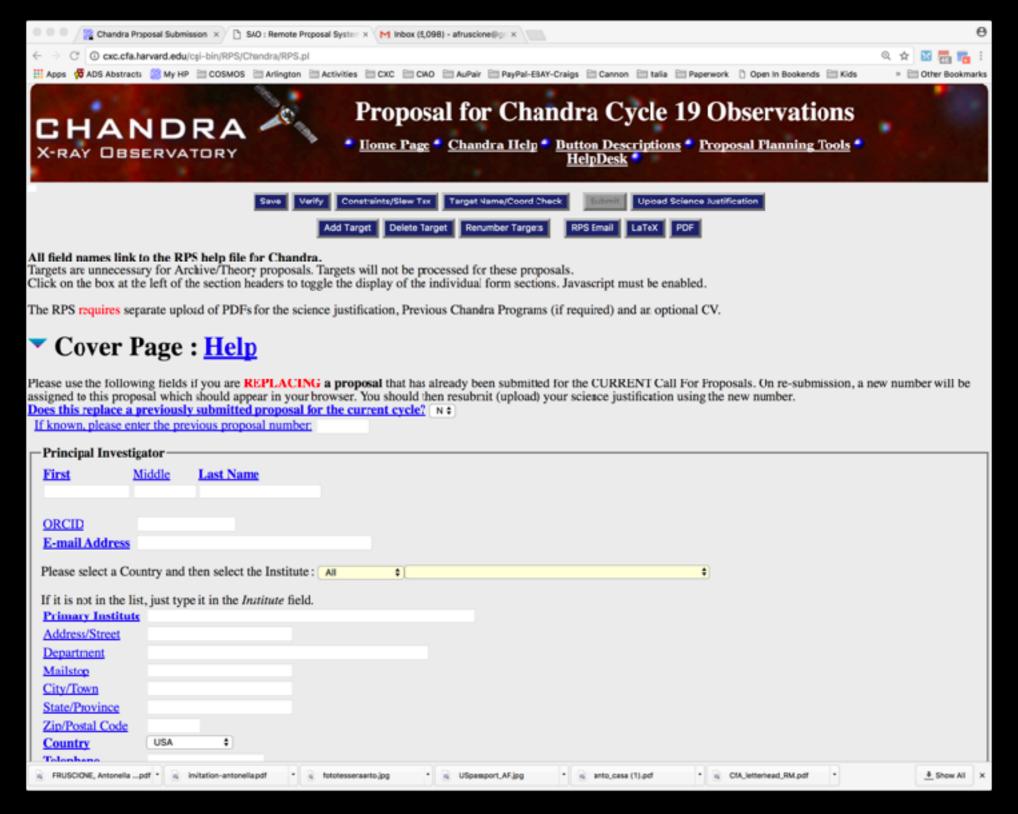


# **Chandra Proposal Submission System**

(R.I.P. RPS)



#### Current RPS (ca. 1995 with a lot of revisions)





Astronomical Data Analysis Software and Systems IV ASP Conference Series, Vol. 77, 1995 R. A. Shaw, H. E. Payne, and J. J. E. Hayes, eds.

#### Design of a Remote Proposal Submission System

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Abstract. Many astrophysics and astronomy tools have been developed utilizing NCSA Mosaic and the World Wide Web (WWW). Several tools have been developed at the High Energy Astrophysics Science Archive Research Center (HEASARC) at NASA's Goddard Space Flight Center, including a Remote Proposal Submission<sup>1</sup> (RPS) system for NASA satellite missions. The RPS provides facilities for submitting Observation Request forms. It is an automated service, designed to support several missions. Currently only the XTE mission is supported. Other projects that will be supported in the future include ASCA, GRO, and ROSAT.

In spite of the sometimes severe disadvantages, we believe the WWW is a very effective platform for rapid information systems development in astronomy and astrophysics. The WWW provides a substantial pre-existing infrastructure sup-



### **MAIN RPS ADVANTAGES:**

Has been and still is used by many missions

Well known by the "experienced" X-ray community



# WHY CHANGE IT?



#### MAIN DISADVANTAGES WITH OUR VERSION OF RPS

- Cannot see what has been submitted (we receive lots of emails after submission ... "have you received my proposal?" "what have you received?")
- Not easy to resubmit before the deadline after the first submission (lots of work on our side matching first submission with resubmissions)
- A lot of information presented in linear fashion: very easy to miss required fields
- Not flexible for dynamic changes (for example number of co-ls, number of monitor observations)
- Some mistakes would lead to strings of problems (e.g typo in email address of PI)
- Not possible to resubmit from one cycle to the next
- Cumbersome set of actions (e.g. download the html, reload the html). Easy if you are used to it, but not easy for new users or users who propose rarely
- Very old look and feel



# Why NOW

10+ more years of mission. If not now when?

### Also

- address modern security concerns
- better maintainability into the future
- · less convoluted operations (less errors, less staff)



#### **TOP PRIORITIES**

#### Phase 1 (cycle 20)

- Preserve Existing RPS functionality
- Make RPS a user-friendly web form
- Keep the same proposal number on resubmission
- People need to be able to determine what they have submitted on their own without submitting helpdesk tickets
- Make it easy to submit large target lists online
- Preserve 'clean' coI information allow proposers to search for individuals
- Easily reuse forms between years
- Share common files between proposals (CV, previous experience)

#### Phase 2 (cycle 21+)

All the requirements that would not be feasible/realistic for Phase 1 given time and resources

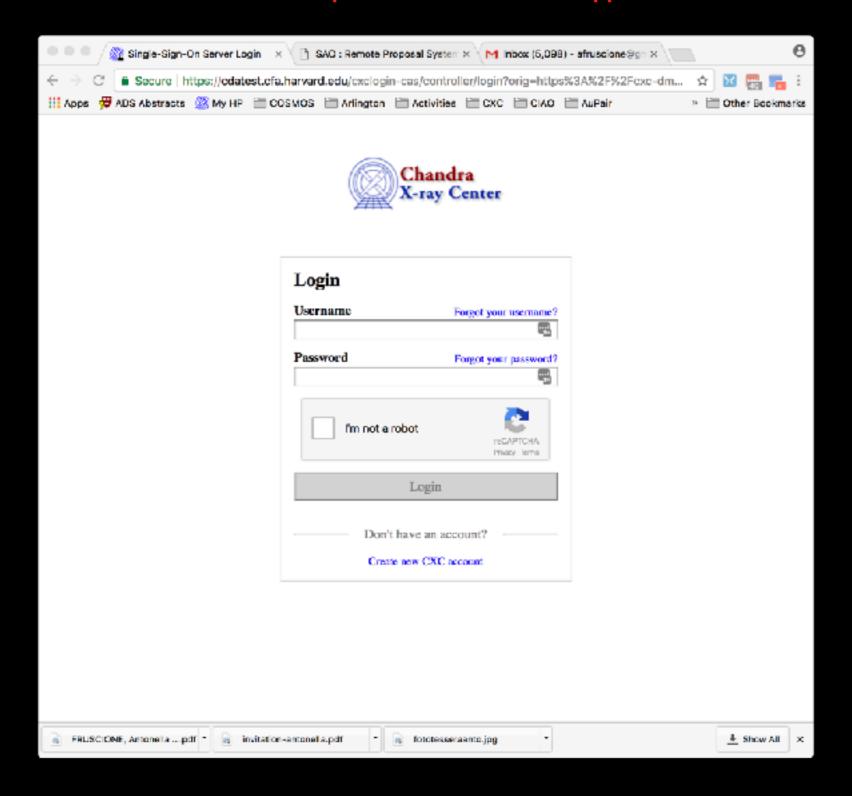
#### For example:

Real Time conflict checking
Real Time validation of fields
Assist in generation of Previous Chandra
Validate page length
And many others ....

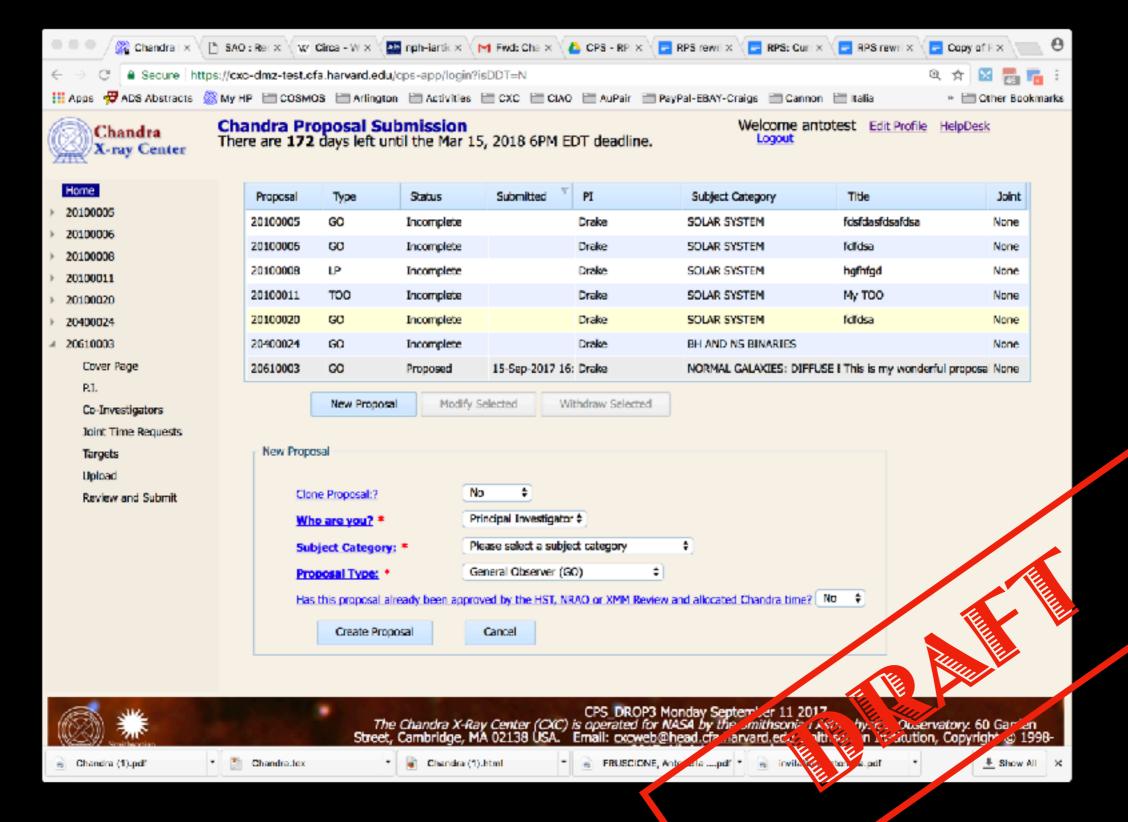


## **New CXC Login Page**

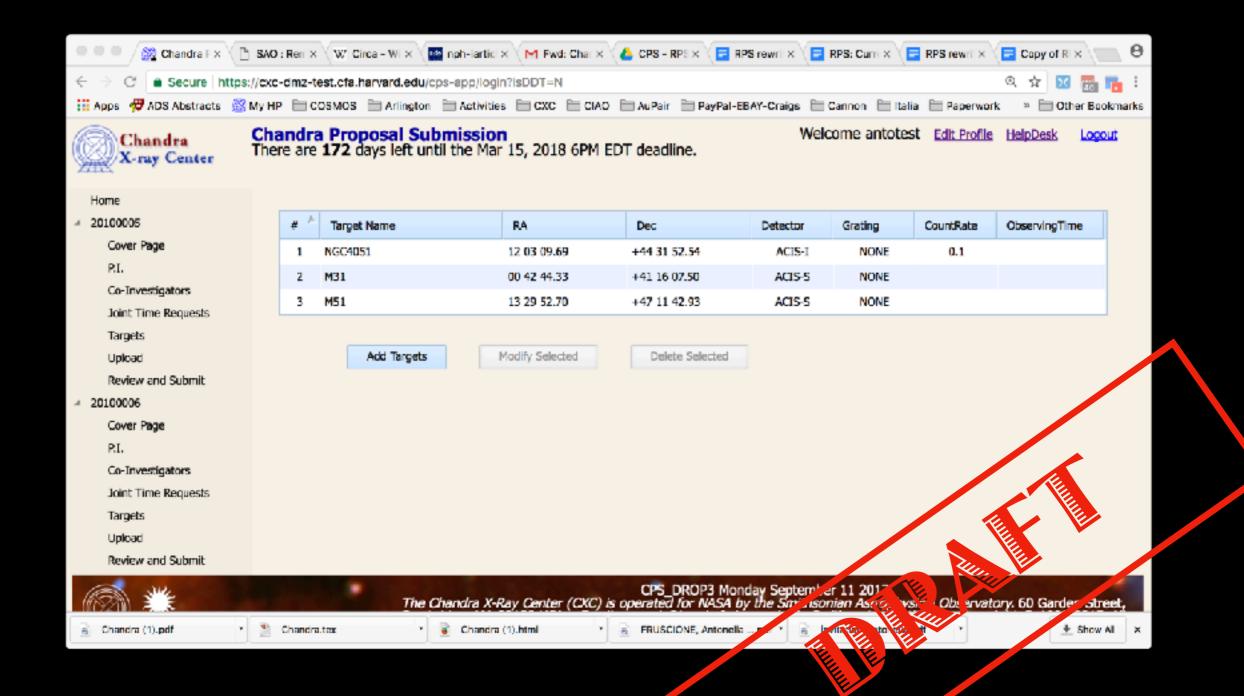
**Built for CPS and planned for other CXC applications** 



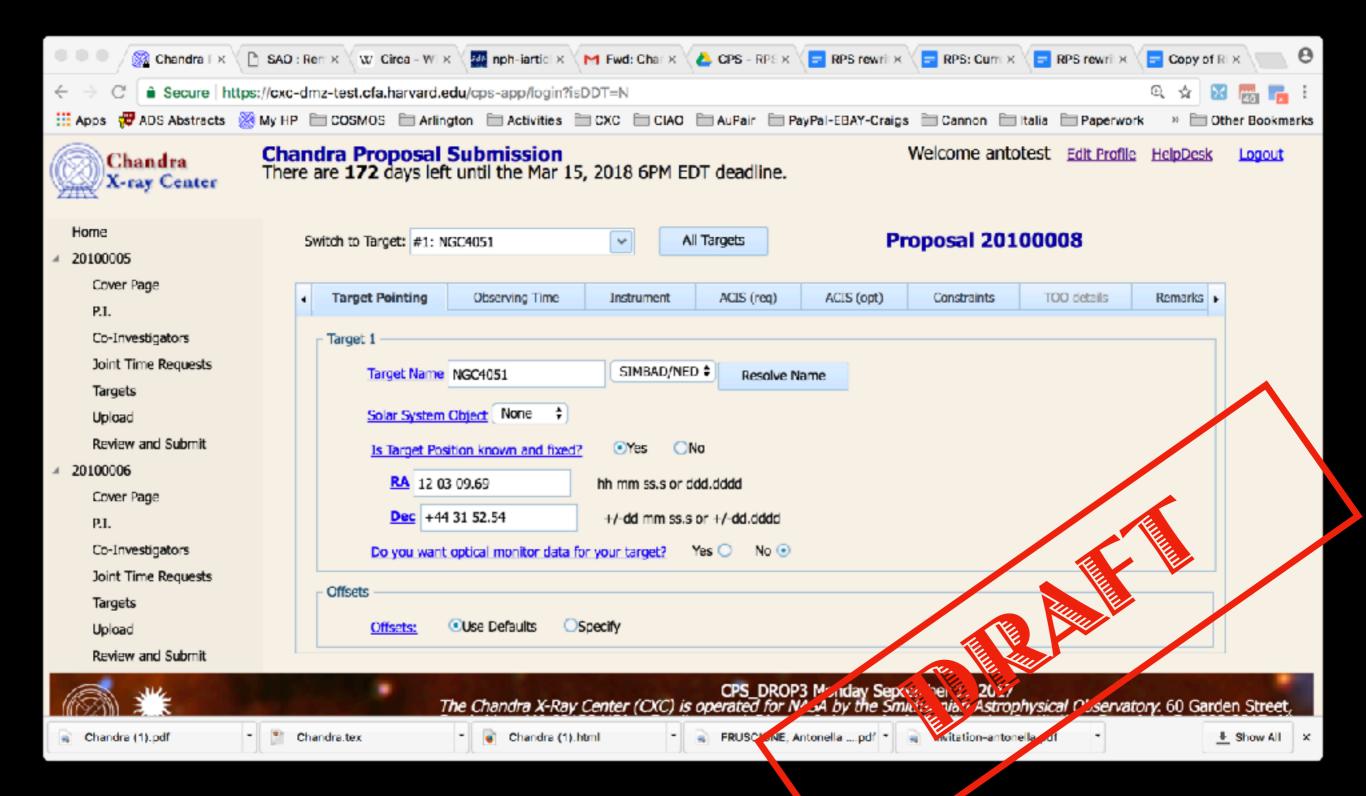




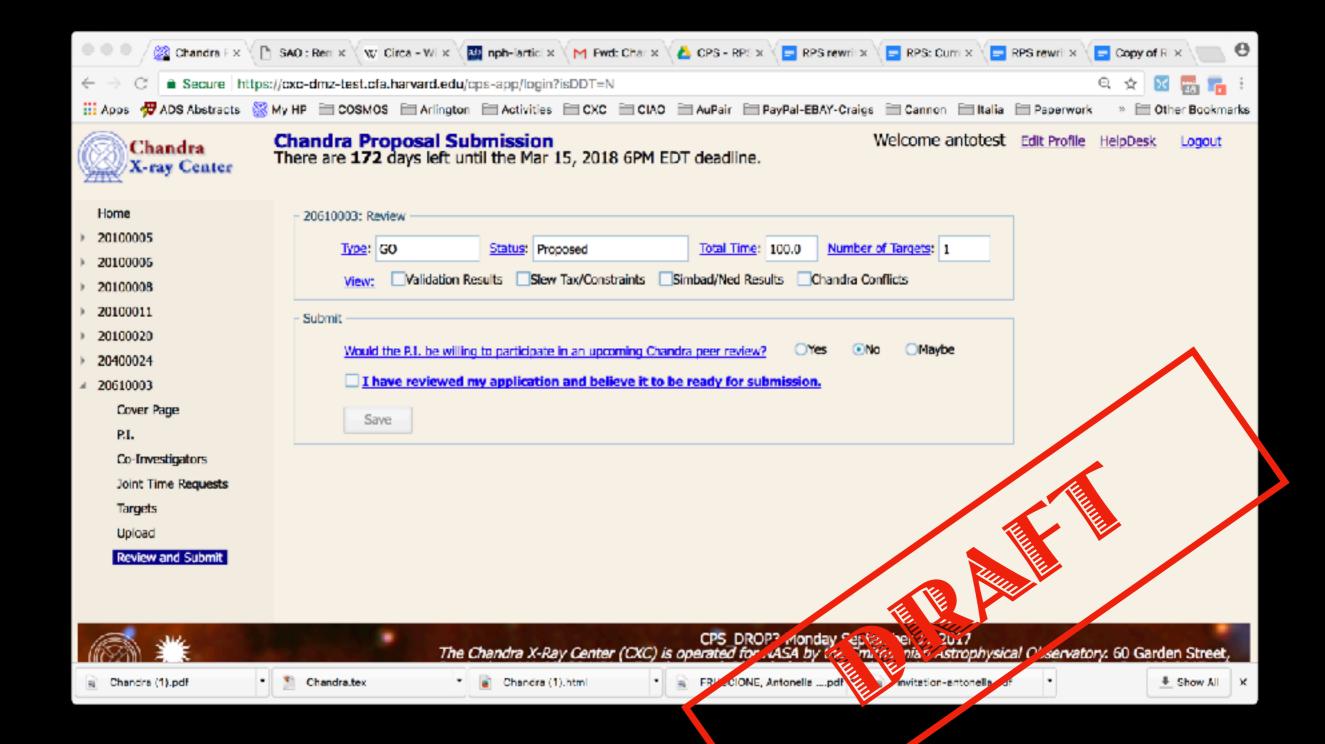














### **Current Status of the project**

- Started development in January 2017
- Two internal software releases in May and June (Drop 1 and 2) with rapid CDO testing and feedback
- First complete and useable internal release on September 15 (Drop 3A). Again rapid testing and feedback
- Next internal release planned for ~October 3 (Drop 3B)
- Full testing starts (within CXC and with outside beta testers) including testing of the server load

#### Plan A

- Public release on Dec 15 with the Call for Proposals for Cycle 20
- Widely announce CPS to the community
- Invite people to sign up for an account as soon as possible before the March deadline (and possibly have all the old cycles proposals loaded in the system)

#### Plan B

- Push the release of CPS to Cycle 21 and keep the current RPS for this cycle
- Decision will be made ~November.
- Current (old) RPS is ready to go for cycle 20

#### (Plan C)

(Release on Dec 15 and revert to RPS if \*major\* problems are found) ... Would like to avoid for obvious reasons