



Chandra Users' Committee

CXC Manager's Status Report

For the period April 07 – September 07

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CXC Manager

19 September 2007



Topics

- Program Level Status
 - Program Management
 - Spacecraft
 - Science Instruments and Calibration
 - Mission Planning
 - OCC
 - Data Processing
 - CXCDS
 - Chandra Director's Office
 - Education and Public Outreach
- Mission Metrics
- Chandra Grant Awards

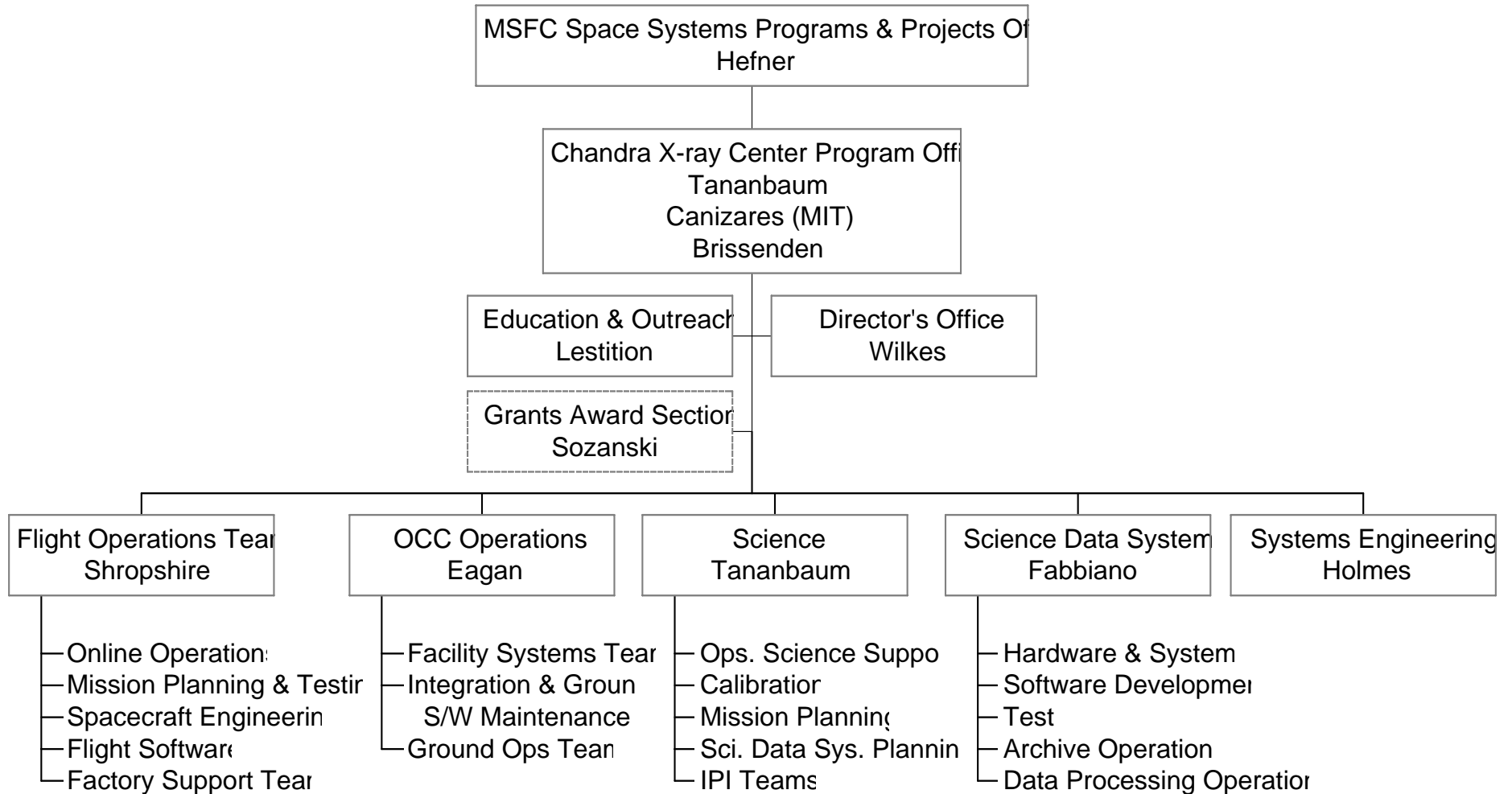


Program Level Status

- Program Management
 - **Budget:** NASA reduced FY07 Chandra program funding by \$2.5M (\$2.3M of which is from CXC). We developed approaches for absorbing the reduction without seriously impacting CXC operations, and are meeting our new budget. Submitted 2007 Program Operating Plan 5/20. Current funding goes through 11/10.
 - **Senior Review:** Notified in April of the plan for a Senior Review of the Chandra Program in April 2008. No further details have been provided to date and HQ directed the Program to submit a budget request at the previously planned levels for FY08 and beyond.
 - **Staffing:** Staff numbers remain near FY06 levels, as planned.
 - **Facilities:** A backup version of the OCC's computer system has been purchased and received, and is being installed in the CfA facility at Cambridge Discovery Park. String will provide backup operations capability in the event of a major outage at the OCC.



CXC Organization





Program Level Status

- Spacecraft
 - Continues to operate extremely well overall
 - No spacecraft anomalies during this period
 - Nominal passages through summer eclipse season, 6/24–7/12

- Science Instruments
 - Instruments are operating extremely well.
 - A test was conducted to turn off the ACIS detector housing heaters to assess the potential to help control the ACIS focal plane temperature.



Program Level Status

- Mission Planning

- 4 load-interrupt TOOs:

Accepted	Target	Time*
4/2	AXP 1E 1048.1-5937	3d 18h
5/27	M82 ULX	5d 5h
6/12	Swift J195509.6+261406	2d 2h
8/12	GRS 1915+105	1d 16h

*Time from TOO approval to start of observation

- OCC

- The OCC completed its external security audit of the OCC's computer systems 5/17. We await formal Authority to Process from NASA headquarters.



Program Level Status

- Data Processing
 - Automatic processing is current; time from end of observation to delivery to user remains at about one day.
 - Data reprocessing (Repro 3) is complete except for the Feb 2000 safemode period; will be completed by 9/30. A ‘patch’ reprocessing of 398 observations (Repro 3A) was completed 8/12.

- CXC Data System Releases

<u>Version</u>	<u>Date</u>	<u>Main contents</u>
DS 7.6.10.4	5/16	Cycle 10 Peer Review release
DS 7.6.11	7/2	DS infrastructure release
DS 7.6.11.1	9/4	AP & SAP bug fix
CIAO 4.0 β 1	5/16	Tools-only release
CIAO 4.0 β 2	8/23	Tools & ChIPs release



Program Level Status

- CXC Data System Planned Releases

<u>Version</u>	<u>Date</u>	<u>Main contents</u>
DS 7.6.11.2	10/15	ACIS params; deepfield RPS updates
DS 7.6.11.3	12/15	Cycle 10 release: RPS upgrades, TOO GUI
DS 7.6.12	~2/8/08	DS Solaris 10 release
CIAO 4.0 β 3	11/7	Sherpa + tools & ChIPs
CIAO 4.0	12/15	Major CIAO data analysis release

- Level 3 Catalogue (*code freeze date; 2.5-2.7 are internal DS releases)

<u>Version</u>	<u>Date</u>	<u>Main contents</u>
CAT 2.5	7/20*	Batch processing, merge pipeline, AP&archive interfaces
CAT 2.6	11/2*	L3 reprocessing & versioning; auto QA pipeline
CAT 2.7	1/11/08*	Special processing; QA pipeline
CAT 3.0	~5/15/08	Release to Operations; start production processing

- Calibration Database (CalDB) Releases

CalDB 3.4.0	5/16	ACIS time-dependent gain corrections, blank sky, other
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Program Level Status

- GO Program
 - Cycle 9 peer review of 664 proposals was held 19-22 June; results were announced on schedule, 7/12
 - Check of observing parameters (for long-term schedule) finished 9/5; new process this year
 - Cost proposal deadline was 9/13

- Chandra Fellows program
 - Budgets for next year have been received, reviewed and approved
 - Applications for next cycle due 10/31; review committee almost complete
 - Fellows symposium at CfA to be held 10/10



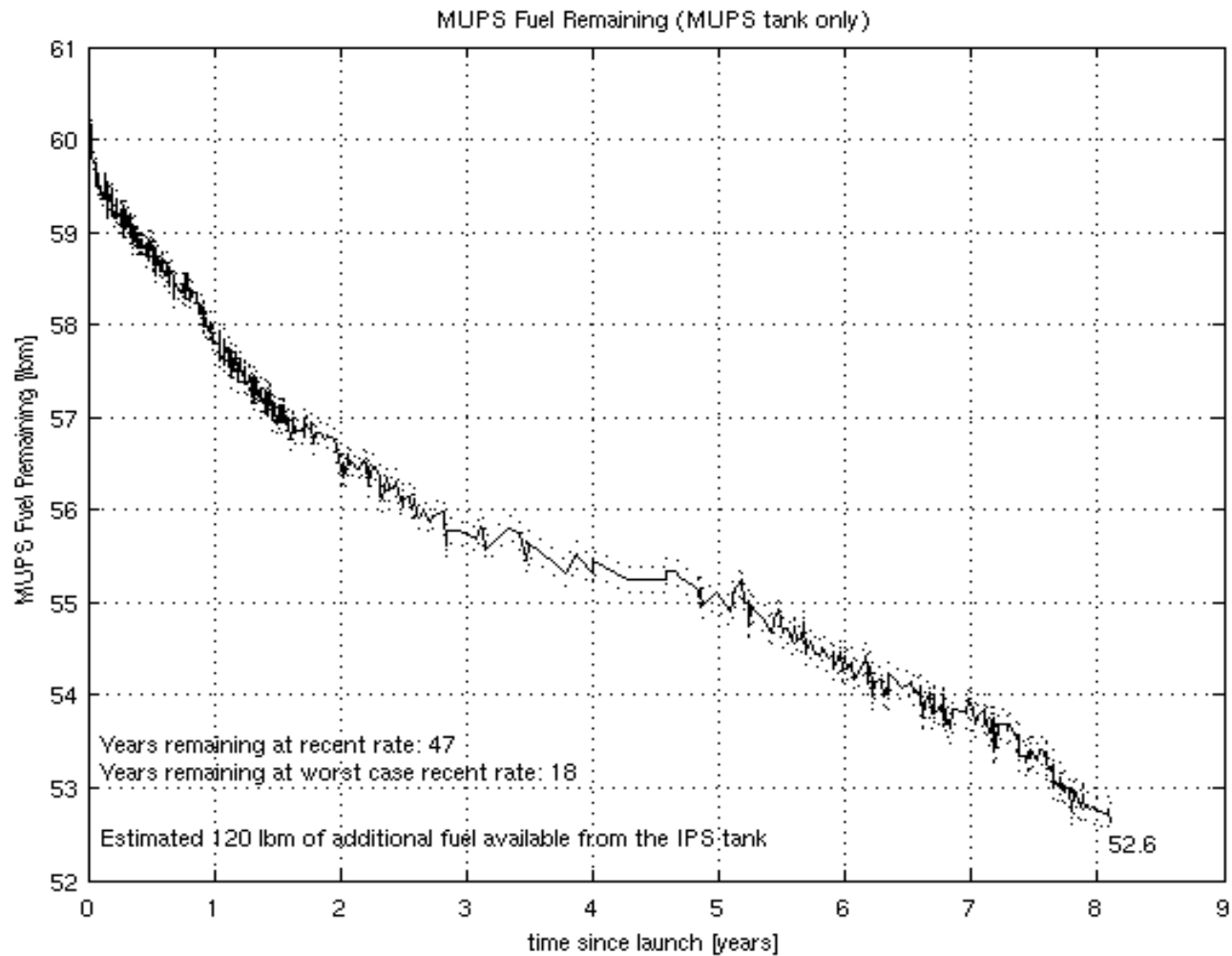
Program Level Status

- Education and Public Outreach
 - 18 press activities (1 NSU, 7 press releases, 7 image releases, 3 press postings (press results driven largely by success of NSU on SN 2006gy)
 - 143 print articles (incl. 1 NY Times, 2 Wash. Post (one front page) , front page USA Today, front page Christian Science Monitor, cover of Time)
 - 745 web articles
 - 601 TV broadcasts including national news on ABC, CBS, NBC, major network morning shows, Fox, CNN, MSNBC,BBC)
 - 5 radio broadcasts
 - CBS "Evening News with Brian Williams" shows Chandra Bullet Cluster image as one of the top three images requested from its MSNBC web site.
 - 11 workshops
 - 5 Chandra podcasts released (see <http://chandra.harvard.edu/resources/podcast>)
 - 233 requests for 43,912 items of Chandra materials
 - 71 permissions to use Chandra content and images
 - Released Cycle 9 CfP and invitation letter to PI's for EPO programs



Mission Metrics

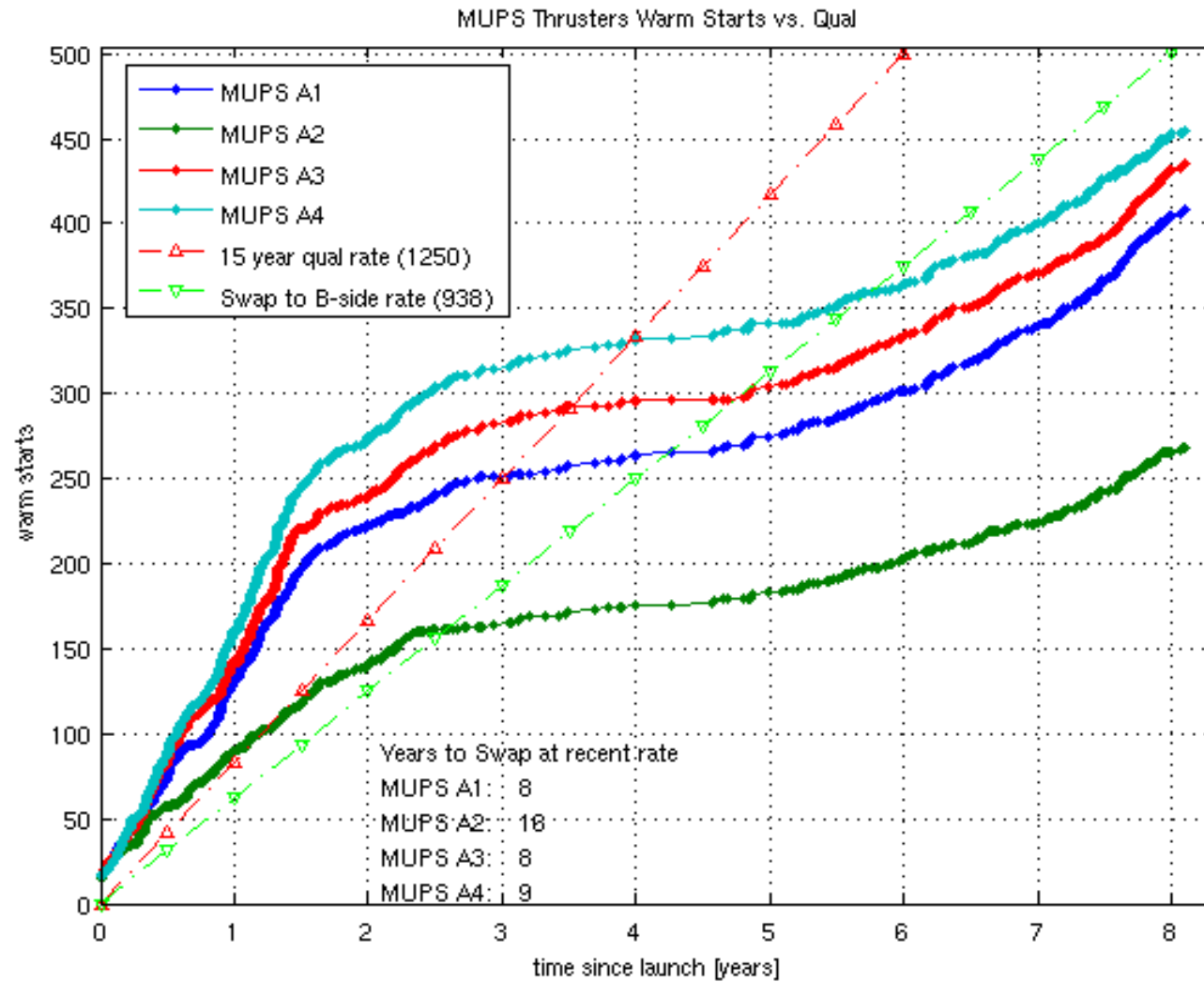
MUPS Fuel Usage





Mission Metrics

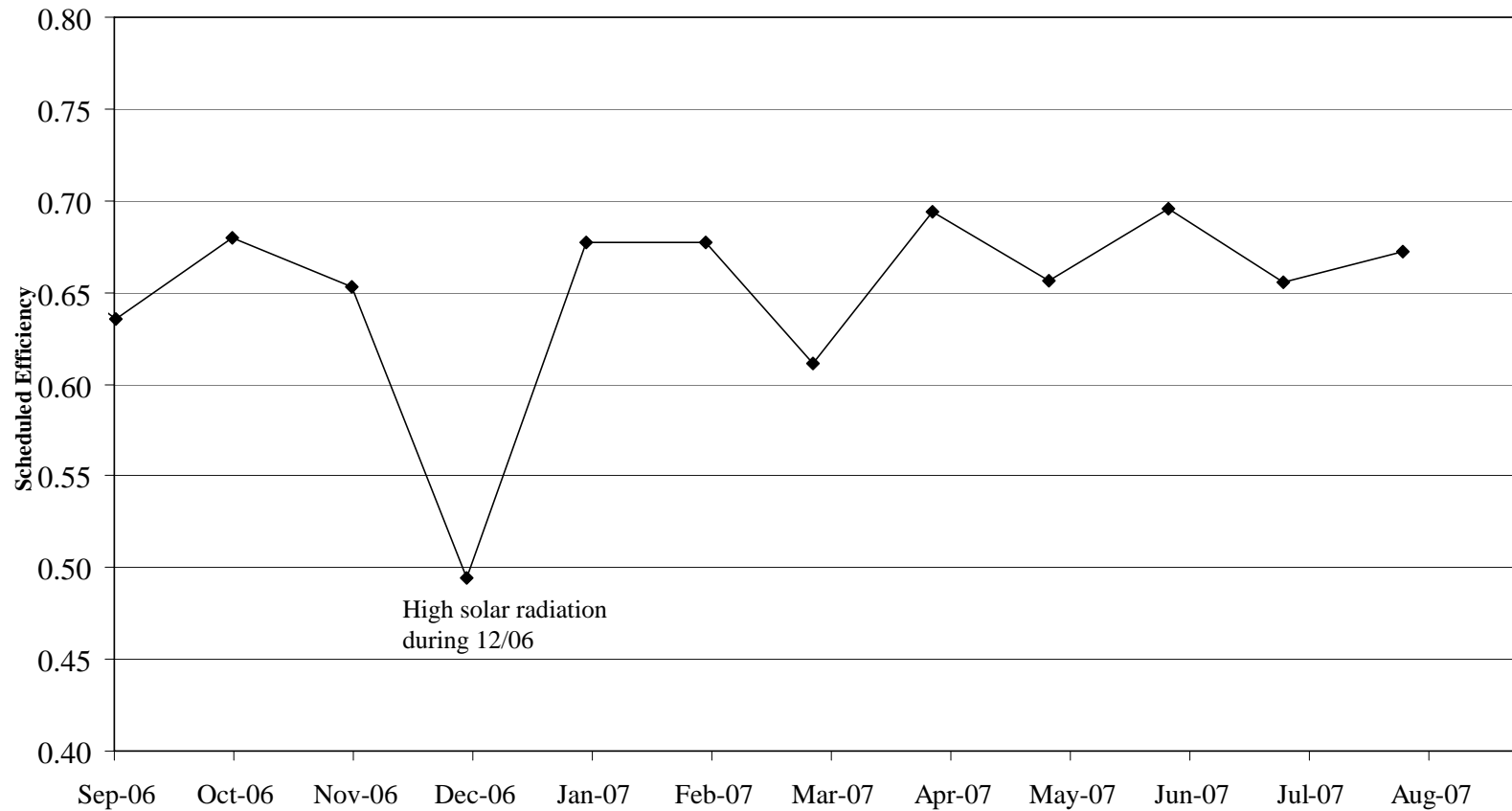
Thruster Warm Starts





Mission Metrics

Observing Efficiency





Data Delivery Effectiveness

		<u>As of middle of following month</u>				<u>As of 9/11/07</u>			
<u>Month</u>	<u>Number of Obs</u>	<u>Days to Data Delivery</u>			<u>Number Deliv</u>	<u>Number Outstanding</u>	<u>Number Deliv</u>	<u>Number Outstanding</u>	<u>Comments</u>
		<u>Min</u>	<u>Avg</u>	<u>Max</u>					
Sep-06	59	0	1	7	59	0	59	0	
Oct-06	57	0	1	11	57	0	57	0	
Nov-06	67	0	1	15	67	0	67	0	
Dec-06	59	0	1	9	59	0	59	0	
Jan-07	52	0	1	2	52	0	52	0	
Feb-07	71	0	1	5	71	0	71	0	
Mar-07	84	0	1	5	84	0	84	0	
Apr07	65	0	1	3	65	0	65	0	
May-07	54	0	1	8	54	0	54	0	
Jun-07	69	0	1	3	69	0	69	0	
Jul-07	83	0	1	3	83	0	83	0	
Aug-07	61	0	1	14	61	0	61	0	



Grant Award Effectiveness

Month of Data Delivery	Federal Grants (1,3)	<u>SAO Grants (2)</u>						
		<u>As of middle of following month</u>				<u>As of 9/12/07</u>		
		Non-Federal Grants (3)	No. Grants Awarded	No. Outstanding	Avg days to award (4)	No. Grants Awarded	No. Outstanding	Outstanding Awards Proposal no, Comments
Sep-06	2	10	10	0	13	10	0	
Oct-06	0	10	0	10	n/a	10	0	Grant awards suspended pending receipt of CXC funding from NASA
Nov-06	0	11	0	11	n/a	11	0	Grant awards suspended pending receipt of CXC funding from NASA
Dec-06	0	64	57	7	15	64	0	(5); NASA resumed funding on 12/8/06
Jan-07	2	42	27	15	20	42	0	(5)
Feb-07	2	16	0	16	n/a	16	0	
Mar-07	0	14	1	13	9	14	0	
Apr-07	0	11	2	9	16	11	0	
May-07	1	10	7	3	10	10	0	
Jun-07	1	16	15	1	18	16	0	
Jul-07	0	13	11	2	17	13	0	
Aug-07	1	17	6	11	32	6	11	(5) 8301010 (A,B,C,D), 8400850, 8400982, 8500140, 8700989, 8800737, 8800836, 8800951

(1) Grants to scientists at Federal institutions awarded as interagency transfers through MSFC.
 (2) Grants to scientists at non-Federal institutions awarded through the SAO Contracts and Grants Department.
 (3) Number of grants eligible for award, for which data were delivered to the observer in the month.
 (4) Average days from data delivery to grant award to observer.
 (5) Grant backlogs due to temporary unavailability of staff in SAO's Grant Awards section.