



# GLAST Science Support Center Status Report

C. Shrader, GLAST SSC GSFC, Code 661

GLAST User's Committee, 03/03/2008 - C. Shrader GSSC



## GSSC: Milestones, Staffing



### • Presentation to GLAST FOR, Feb 2008

- No major issues
- Requirements closed or to be closed (or waived) by March 16 freeze date
- GSSC ready to support post-launch activities

### • Departure of 1 key SW developer

- In response, will recall 0.5 FTE, employee who had transitioned to MOC
- Adding 0.1 FTE planning & schedule support during LEO
- Planning replacement, i.e. flat staff profile through L+1yr



## GI Program: Schedule Drivers



Date	Months-L	Milestone	
07-Jun-07	-11	Proposal materials on GSSC website	
07-Sep-07	-8	GI Cycle 1 proposal deadline	
17-Dec-07	-5	Peer review	
01-Jan-08	-4	Results of peer review	
01-May-08	0	GI program funding decision	
16-May-08	0	LAUNCH!!!	
Jul-08	2	Release of GBM SAE Tools, <mark>GI Cycle 1</mark> Begins, GBM + partial LAT data release	
Dec-08	7	Cycle 2 proposal materials & SAE release	
Jan-09	8	Release of preliminary LAT source list	
Mar-09	10	GI Cycle 2 Proposal Deadline	
Jul-09	14	GI Cycle 2 Begins, full LAT data release	







- Cycle-1 Program nearly implemented
   Separate report
- Participation in HEAD special session
   GSSC services
- Web services & help desk successfully implemented for Cycle-1 support
  - Typically 3-4 queries per day near deadlines
  - Inordinate spike associated with GLAST naming contest; lots of SPAM
  - Accumulated FAQ list





- Timeline and ToO support has been extensively tested at this point
  - Walkthrough demo, exchange products w/MOC
  - Similar exercise planned for timeline preparation
- 4 Mission Planning Exercises completed



### **GSSC** Operations Support



### Mission Planning Exercises

- Proposal submission
- Proposal ingest
- Long Term Scheduling
- GSSC ingest of GLAST ephemeris, TDRSS ephemerides
- GSSC delivery of preliminary science timeline
- GSSC ingest of ISOC and GIOC timelines
- GSSC delivery of timeline package
- Ingest and execution of LAT calibration observations
- TOO evaluation and commanding





- GSSC is required to provide science analysis software (SAE)
  - FRD § 5.3.3.2
- Software developed jointly w/LAT team
  - LAT team manages the SAE CC until L+5m
  - Code architecture shared: LAT-GSSC
  - FRD requirement: single OGIP compliant configuration-managed software suite
  - SAE: current version v9r4p1
  - In use supporting LAT Service Challenge
  - Successfully ported to the HEASARC build system
     > V9r5 to be β-tested by "end-user" community

# Data Ingest Completion Milestones

- OPUS is installed and running
- GSSC Pipelines completed
  - Data Ingest Pipeline
  - Proposal Ingest Pipeline
  - Level 0 Data Ingest Pipeline
  - Command Ingest Pipeline
  - LAT Data Ingest Pipeline
  - GBM Data Ingest Pipeline
- Lingering DitL, ETE, and MPEx issues to be addressed in Release 9





### GSSC Software

■ *Release 1 – 8 complete (01/31/08)* 

Release 9 (03/08/08) Launch support

Bug fixes and minor updates only

### GSSC Hardware

All major CPU's in-place and configured

Primary computers in Bldg. 2

Backup computer in Bldg.14



### **GSSC AI Status**



- SOOG apparently disbanded, so AI-46 no longer relevant?
- AI-53: Web form implemented



### Multi-Wavelength Observation Webform

AI 53: Establish website for observers to post GLASTrelevant observations. This information could potentially be given consideration in GLAST re-planning.

Web page established, awaiting observer inputs...

	🕹 GSSC: Proposals » Multiv	wavelength Observations » Report	ing - Mozilla Firefox						
Acco Actro-ph & M'Ines & ADS Query & Forecast-Potomac   EUD Coloque & Merriam-Webster On & Ine SCR.Rev. Mail: Indox @ HEASARC ? 7-Day For @ Goode Rev. @ NEFIRES Capture au SPACE FLIGHT CENTER + GLAST Homepage SPACE FLIGHT CENTER + GLAST Homepage Capture au Capture	jle Edit <u>Vi</u> ew Higtory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp								
* SC: Re       Mell 1: thox       MetAsARC       ? 7.0ay For       © Goode Re       WSPRES       © Captre B	💠 • 🗼 • 💽 😣 👔	👔 🔝 http://glast.gsfc.nasa.gov/ssc/re	sources/multi/reporting/	<ul> <li>Screenshot windows</li> </ul>	Q				
	🙀 APOD 📴 Astro-ph 💰 NY Times 🌉 ADS Query 💰 ForecastPotomac 📄 EUD Colloquia 👄 Merriam-Webster On 🔣 Time								
	• 55C: Re 🦳 Mail :: Inbox	🕅 HEASARC 😒 7-Day For	🕤 Google Re 📄 NSPIRES	. 🔴 Capture a 🔣 GSSC: (	1				
HOME       RESOURCE       POPOSALS       DATA       HEASARC       HELP         + GSSC Home       Multiwavelength Observations Reporting            And are relevant to GLAST. The GLAST melline; for example, a requested traget-of-Opportunity observations the end of the form you can indicate whether information about these observations is proprietary, and should be restricted to the GLAST Project scientist and his deputies. All items are required.         Observations       Name:	SPACE FI	LIGHT CENTER		Search + GO	^				
HOME       RESOURCE       POPOSALS       DATA       HEASARC       HELP         + GSSC Home       Multiwavelength Observations Reporting            And are relevant to GLAST. The GLAST melline; for example, a requested traget-of-Opportunity observations the end of the form you can indicate whether information about these observations is proprietary, and should be restricted to the GLAST Project scientist and his deputies. All items are required.         Observations       Name:									
HOME       RESOURCE       POPOSALS       DATA       HEASARC       HELP         + GSSC Home       Multiwavelength Observations Reporting            And are relevant to GLAST. The GLAST melline; for example, a requested traget-of-Opportunity observations the end of the form you can indicate whether information about these observations is proprietary, and should be restricted to the GLAST Project scientist and his deputies. All items are required.         Observations       Name:				-					
HOME       RESOURCE       POPOSALS       DATA       HEASARC       HELP         + GSSC Home       Multiwavelength Observations Reporting            And are relevant to GLAST. The GLAST melline; for example, a requested traget-of-Opportunity observations the end of the form you can indicate whether information about these observations is proprietary, and should be restricted to the GLAST Project scientist and his deputies. All items are required.         Observations       Name:	GL	AST Scienc	E SUPPORT	CENTER					
+ GSSC Home       Multiwavelength Observations Reporting         Resources       Please provide information on your observations that are relevant to GLAST. The GLAST traget-of-Opportunity observation may be modified or rejected because of an on-going multiwavelength campaign. At the end of the form you can indicate whether information about these observations is proprietary, and should be restricted to the GLAST Project Scientst and his deputies. All items are required.         Multiwavelength       Observations         Users' Group       E-mail:         Telephone:       Object:         Source Coordinates:       Object:         Ibrary       Observation Storp Date:       (Format: YYYY-MM-DD)         News Archive       Details: (max 800 characters)       Details: (max 800 characters)									
Resources         Mission Status         Observing Timeline         Observations         Users' Group         Hobservation Reporting Form         Newsletter         Library         Deservation Status         Observations Reporting Form         Newsletter         Library         Deservations Status         Observations Reporting Form         Newsletter         Library         Deservation Stop Date:         Deservation Stop Date:         Deservation Reporting Form         News Archive	НОМЕ	RESOURCES PROPOSALS	DATA HE	EASARC HELP					
Resources         Mission Status         Observing Timeline         Observations         Users' Group         Hobservation Reporting Form         Newsletter         Library         Deservation Status         Observations Reporting Form         Newsletter         Library         Deservations Status         Observations Reporting Form         Newsletter         Library         Deservation Stop Date:         Deservation Stop Date:         Deservation Reporting Form         News Archive									
Resources       mission will use these data in planning the GLAST timeline; for example, a requested Target-of-Opportunity observation may be modified or rejected because of an on-going multiwavelength campaign. At the end of the form you can indicate whether information about these observations is proprietary, and should be restricted to the GLAST Project Scientist and his deputies. All items are required.         Observations       Name:         Users' Group       E-mail:         Multiwavelength       E-mail:         Observations       Difect:         Source Coordinates:       Difect:         Diservation Start Date:       (Format: YYY'-MM-DD)         Related Links       Diservation Stop Date:         News Archive       Details: (max 800 characters)	+ GSSC Home								
Mission Status       multiwavelength campaign. At the end of the form you can indicate whether information about these observations is proprietary, and should be restricted to the GLAST Project Scientist and his deputies. All items are required.         Observations       Name:         Users' Group       E-mail:         Multiwavelength Observation Reporting Form       Diject:         Newsletter       Object:         Library       Observation Start Date:         News Archive       (Format: YYYY-MM-DD)         Wavelength Band:       Details: (max 800 characters)		mission will use these o	lata in planning the GLAST tim	neline; for example, a requeste	± 🗌				
Scientist and his deputies. All items are required.     Observations   Users' Group   E-mail:   Multiwavelength Observations   Telephone:   Observation Reporting Form   Poservation Start Date:   Ibrary   Observation Start Date:   Observative   Wavelength Band:   Details: (max 800 characters)	Resources	multiwavelength campaig	n. At the end of the form you	can indicate whether information	n 🗏				
Observations       Name:         Users' Group       E-mail:         Multiwavelength Observations       Telephone:         + Observation Reporting Form       Object:         Newsletter       Source Coordinates:         Library       Observation Start Date:         Diservation Stop Date:       (Format: YYYY-MM-DD)         Related Links       Observation Stop Date:         Wavelength Band:       Details: (max 800 characters)				e restricted to the GLAST Projec	t				
Users' Group       E-mail:         Multiwavelength Observations       Telephone:         + Observation Reporting Form       Dbject:         Newsletter       Source Coordinates:         Library       Observation Start Date:         Chirary       Observation Stop Date:         News Archive       Wavelength Band:         Details: (max 800 characters)		No							
Multiwavelength Observations       Telephone:         + Observation Reporting Form       Object:         Newsletter       Source Coordinates:         Library       Observation Start Date:         Deservation Stop Date:       (Format: YYYY-MM-DD)         Related Links       Observation Stop Date:         Wavelength Band:       Details: (max 800 characters)		Name:							
Observations       Telephone:         + Observation Reporting Form       Object:         Newsletter       Source Coordinates:         Library       Observation Start Date:         Observation Stop Date:       (Format: YYYY-MM-DD)         Related Links       Observation Stop Date:         Wavelength Band:       Details: (max 800 characters)		E-mail:							
Form       Source Coordinates:         Newsletter       Source Coordinates:         Library       Observation Start Date:       (Format: YYYY-MM-DD)         Related Links       Observation Stop Date:       (Format: YYYY-MM-DD)         News Archive       Wavelength Band:       Details: (max 800 characters)		Telephone:							
Newsletter       Ubservation Start Date:       (Format: YYYY-MM-DD)         Related Links       Observation Stop Date:       (Format: YYYY-MM-DD)         News Archive       Wavelength Band:       Details: (max 800 characters)									
Related Links       Observation Stop Date:       (Format: YYYY-MM-DD)         News Archive       Wavelength Band:         Details: (max 800 characters)	Newsletter	Source Coordinates:							
News Archive Wavelength Band: Details: (max 800 characters)	Library	Observation Start Date	: (Format:	YYYY-MM-DD)					
Wavelength Band: Details: (max 800 characters)	Related Links	Observation Stop Date	: (Format:	YYYY-MM-DD)					
	News Archive	Wavelength Band:							
http://glast.gsfc.nasa.gov/ssc/		Details: (max 800 chara	sters)						
nttp://glast.gsfc.nasa.gov/ssc/									
http://glast.gsfc.nasa.gov/ssc/									
http://glast.gsfc.nasa.gov/ssc/									
http://glast.gsfc.nasa.gov/ssc/					~				
	http://glast.gsfc.nasa.gov/ssc/	·							



### **Database Query**



