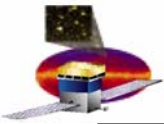


GLAST Large Area Telescope: I&T Test Readiness Review

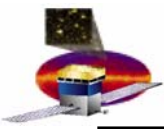
I&T/Online
November 4, 2005

Ric Claus
Online Manager
SLAC












LATTE Status











- **4.10.0 (released August 8)**
 - **Updates for ELX flight LCB production**
- **4.10.1 (released September 7)**
 - **Fixes mixed contributor broadcasts (problem for combined Tower, ACD testing)**
- **4.10.2 (released October 24)**
 - **Fix to recover from network timeouts (NCR #709)**
- **4.11.0 (released October 28)**
 - **Fixes for ELX flight GASU production**
 - **Improved handling of science data containing errors**
- **No substantial changes in LATTE functionality for a long time**
- **LATTE is ready for LAT testing**

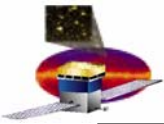


LATTE

Function	Status
Monitoring	
Trending	
Power services	
Run tracking (e-logbook)	
Data visualization (Hippodraw)	
Data archiving	
Data handling (LDF)	
Script running	
V&V	

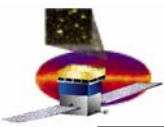
LATTE Scripts

Script	Status	Comments
CAL LPT		Same as for 16 towers
CAL CPT		Same as for 16 towers
TKR LPT		Same as for 16 towers
TKR CPT		Same as for 16 towers
ACD LPT		Use as delivered (slight tweak to accommodate the 16 towers)
ACD CPT		Use as delivered (with slight tweak to accommodate the 16 towers)
CalibGen / MuTrig		Same as for 16 towers
TKR TE-60x		Same as for 16 towers
TRG Time-In		CAL and TKR portions as for 8 towers, ACD portions tested on miniLAT
SVAC – E2E		Updated to accommodate ACD



LATTE Configurations







Configuration	Status
LAT_Primary	Defined (available prior to test)
LAT_Redundant	Defined (available prior to test)

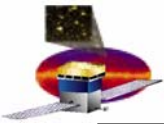


LATTE scripts and configurations

- **Scripts and configurations have evolved with subsystem input**
 - **CAL, TKR, ELX and TRG in good shape**
 - **Scripts have been updated to:**
 - Acquire data under LATTE (Phase 0)
 - Acquire data under LICOS (Phase 2)
 - Analyze results
 - **ACD scripts have not fit well into the paradigm**
 - **Will run (almost) as-delivered on full LAT (Phase 0)**
 - Small tweak to accommodate 16 towers
 - **Some scripts rewritten to run as above (Phases 1&2)**
 - These need to be validated during Phase 1
 - » As-delivered vs rewrite under LATTE
 - » Rewrite under LATTE vs LICOS
- **Scripts and configurations are ready for LAT testing**

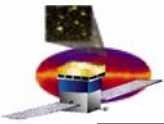
LICOS

Function	Status
TeleCommanding	
Telemetry handling	
Science Data handling	Technique and formats decided. Hand-off from FSW/ELX soon.
Monitoring	
Trending	
Archiving	
Script running	
Configuration tracking (MOOT/FMX)	Design established. Hand-off soon.
Run tracking (e-logbook)	
V&V	



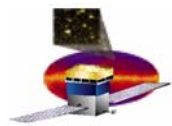
LICOS Scripts

Script	Status
Power On	Well underway
Power Off	About to start work
Reinitialization	Table-top discussion 11/1
Baseline Science Ops Config	
File & Memory Management	Table-top discussion 11/1
Safe Modes	Just started work
Science Modes	
LAT/SC I/F Functional	
Thermal Control	
Survival Heater Test	
Conducted & Radiated Emissions	
Conducted & Radiated Susceptibility	
Science Performance Diagnostics	
Timing Measure & Adjust	



LICOS Scripts (2)

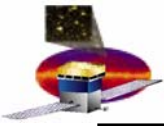
Script	Status
Event Handling	
GRB Handling	
ACD CPT	Rewrite well underway
ACD LPT	Rewrite well underway
CAL CPT	Derived from LATTE version
CAL LPT	Derived from LATTE version
TKR CPT	Derived from LATTE version
TKR LPT	Derived from LATTE version
LAT Config 1 Light Tight Test	
T&DF False Triggers	
T&DF Data Transport Errors	
SVAC – E2E Tests	Derived from LATTE version



LICOS Configurations

- Six LICOS Configurations Identified:

Config No.	LAT UNITS ON																		
	SC-P	SC-R	SIU-P Feed	SIU-R Feed	Pri Htr Feed	Red Htr Feed	SIU-P	SIU-R	GASU-P	GASU-R	EPU-PO	EPU-PI	EPU-R	Towers	ACD	+Y HCB	-Y HCB	PDU-P	PDU-R
1	On	-	On	-	On	-	On	-	On	-	On	On	-	On	On	On	On	On	-
2	-	On	-	On	-	On	-	On	-	On	-	On	On	On	On	On	On	-	On
3	-	On	On	-	On	-	On	-	-	On	On	On	-	On	On	On	On	On	-
4	On	-	-	On	On	-	-	On	-	On	On	-	On	On	On	On	On	On	-
5	-	On	-	On	-	On	-	On	On	-	On	-	On	On	On	On	On	-	On
6	On	-	On	-	-	On	On	-	On	-	-	On	On	On	On	On	On	-	On
	On	On	= Unit is powered On in the LAT Configuration specified																
	-	-	= Unit is powered Off in the LAT Configuration specified																



Mobile rack

- **Architecture finalized**
- **Parts are in-house**
- **Two instances constructed for testing**
- **Final tweaks being done on software installation procedure**
- **Expecting to place racks under CM during next two weeks**
- **Racks will be used for Phase 1 and 2 testing (LATTE and LICOS)**
- **Preparing firewall, switch, bastion host and LICOS server for certification at NRL during week of December 5**

