

GLAST LAT Instrument

*GLAST Monthly
Mission Review
March 6, 2007*



Monthly Mission Review

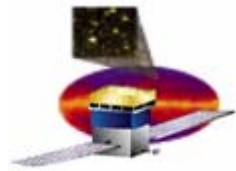
Project Status Overview

March 6, 2007

Ken Fouts

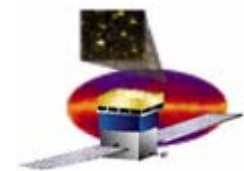
SLAC

kfouts@slac.stanford.edu



LAT Project Status

-
- 2/8 FSW B0-8-2 installed to change TAU read from interrupt to poll. No reboots.**
 - 2/9 Reboots duplicated on SLAC test bed with multiple types of crashes.**
 - 2/11 BAE duplicates problem with similar variations in crashes.**
 - 2/12 SC-LAT Signal Characterization begins**
 - 2/17 Completed LAT Signal Characterization**
 - 2/19 Completed FSW B0-9-0 Load on 2 of 5 processors**
 - 2/20 Completed FSW B0-9-0 Load on 2 more processors (4 of 5).**
 - 2/21 Plan to complete final processor and begin FSW regression tests**
 - 2/22 Completed LAT 0-9-0 install and 6 hours of muons**
 - 2/25 Supported Observatory USN tests**
 - 3/1 Mechanical team completed fly away instrumentation terminations**

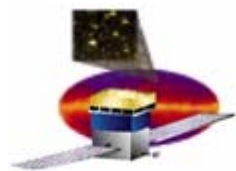


GLAST LAT Instrument

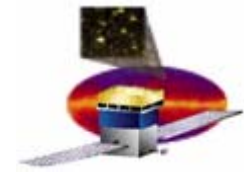
LAT Planned Milestones

*GLAST Monthly
Mission Review
March 6, 2007*

<u>Activity</u>	<u>ECD</u>
LAT FSW 0.9.0	3/6/07
Observatory IRR#3	3/15/07
Observatory CPT Completion	3/16/07
LAT Radiator Integration	3/23/07
Observatory PER	3/28/07
LAT FSW 1-0-0	5/1/07

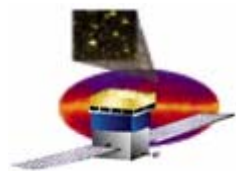


- ❑ **Upload of FSW B0-8-2**
- ❑ **Configuration tool development**
- ❑ **LICOS release 2.6.0**
 - **Driven by change in FMX interface in FSW B0-8-2**
- ❑ **Upload of FSW B0-9-0**
- ❑ **Observatory CPT preparation**
- ❑ **2 Orbit Test preparation**
 - **File-set upload script for configurations and FSW loading**
 - **Created version of intMOOSEApp that doesn't command**
 - Satisfies data bookkeeping protocol
- ❑ **MCR maintenance**
 - **Applied operating system updates**
 - **1 disk failure, 3 "imminent" failures**
 - Disks are being replaced as time permits
- ❑ **Various JIRAed bug fixes**
- ❑ **Supported sorting of issues with data collected by I&T at GD**



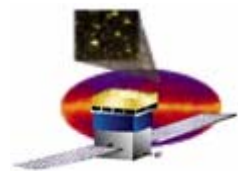
Top I&T Online JIRA issues

- ❑ **State dependent limit handling to avoid false, or irrelevant, alarms (LE-8, LCS-254)**
- ❑ **Register & Software Configuration Tools**
- ❑ **DFI integration into analyses (LS-88, LCS-72, LE-40, LE-38, LE-37, LE-36, LS-214)**



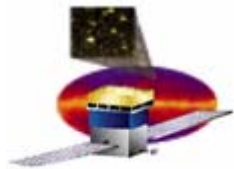
MECH Feb Accomplishments

- ❑ **Completed Fly-away Instrumentation Terminations**
- ❑ **Released Radiator Integration Procedure**
- ❑ **Completed Radiator mini-IRR**
 - Reviewed procedure steps and integration flow
 - Reviewed resource requirements and schedule
 - Confirmed GD shift coverage for critical lifts
 - Radiator lift sling is being re-proof tested at SLAC (expired 3-2-07)



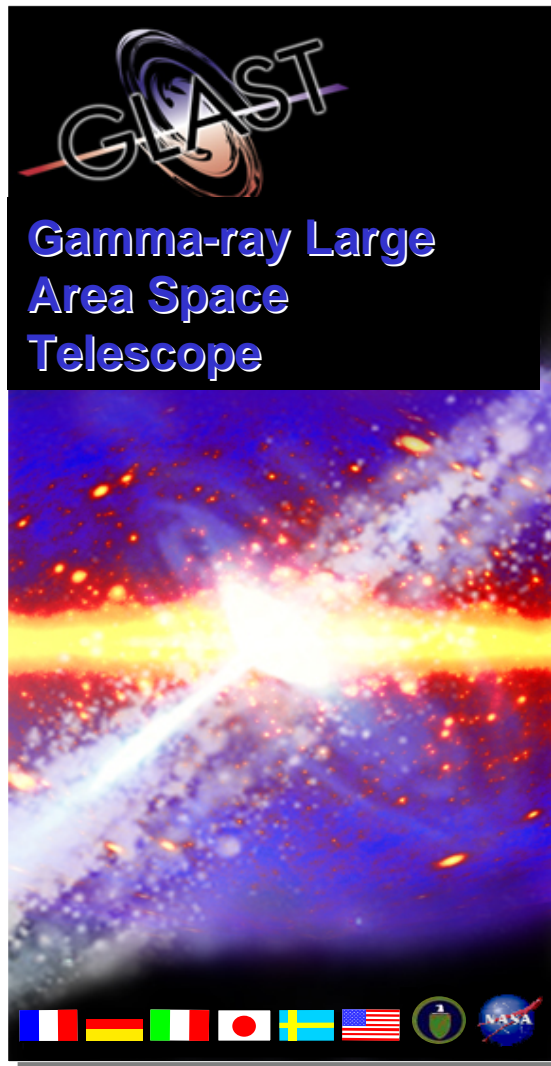
LAT Issues and Concerns

- ❑ **Cap Failure Analysis**
 - DAQ Re-running analysis with revised low voltage failure mode.
- ❑ **Spacecraft Schedule**
 - Lost the window for LAT CPT for config 1
- ❑ **Short time between announcement of 2OT and expected execution**
 - Minimal time provided to implement an Online solution
- ❑ **Dropped telemetry packets**
 - Causes DAQ script instability
- ❑ **SSR capture issues**
 - Delays data transfer/test completion

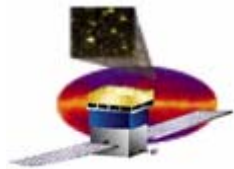


GLAST LAT Instrument

*GLAST Monthly
Mission Review
March 6, 2007*

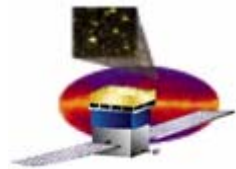


Cost/Schedule Reports for 4.1 LAT Presentation January 2007 Month End



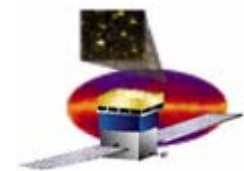
CPR by Organization

January 07 Month-End By Institution K\$	Current Period			Cumulative to Date			At Completion	
	Budget'd Cost Work Scheduled	Actual Cost Work Performed	Cost Variance	Budget'd Cost Work Scheduled	Actual Cost Work Performed	Cost Variance	Budgeted	Latest Revised Estimate
(1)	(2)	(4)	(6)	(7)	(9)	(11)	(12)	(13)
DG *** GSFC	57	74	-18	20,941	20,434	506	21,489	21,489
DH *** HEPL	144	71	73	10,769	10,258	512	12,029	12,029
DL *** SLAC	821	395	426	104,333	104,016	317	109,489	109,489
DN *** NRL	1,685	137	1,548	33,844	33,779	65	35,456	35,456
DO *** Financial Plan Transfer/Sub Out	0	0	0	59	59	0	59	59
DS *** SSU	52	38	14	3,473	3,224	249	3,937	3,937
DT *** Texas A&M	0	0	0	15	15	0	15	15
DU *** UCSC	27	43	-15	2,774	2,693	81	3,034	3,034
DW *** UW	10	1	10	439	345	95	538	538
Gen. and Admin.	0	0	0	0	0	0	0	0
Undist. Budget							0	0
Sub Total	2,797	759	2,038	176,648	174,824	1,824	186,045	186,045
Contingency							2,010	2,010
Total	2,797	759	2,038	176,648	174,824	1,824	188,055	188,055



Cost by Orgs with Variances >100K

January 07 Month-End By Institution & WBS Level 3 K\$	Current Period			Cumulative to Date			At Completion	
	Budgt'd Cost Work Scheduled	Actual Cost Work Performed	Cost Variance	Budgt'd Cost Work Scheduled	Actual Cost Work Performed	Cost Variance	Budgeted	Latest Revised Estimate
(1)	(2)	(4)	(6)	(7)	(9)	(11)	(12)	(13)
DG *** GSFC								
4.1.1 INSTRUMENT MANAGEMENT	30	56	-26	1,838	1,425	413	2,139	2,139
4.1.5 CALORIMETER	0	0	0	0	0	0	0	0
4.1.6 ANTICOINCIDENCE DETECTOR	0	0	0	17,479	17,482	-3	17,479	17,479
4.1.7 ELECTRONICS	0	0	0	0	0	0	0	0
4.1.D SCIENCE ANALYSIS SOFTWARE	27	18	9	1,245	1,150	95	1,492	1,492
4.1.E SUBORBITAL FLIGHT TEST	0	0	0	378	378	0	378	378
OBSTotals:	57	74	-18	20,941	20,434	506	21,489	21,489
DH *** HEPL								
4.1.1 INSTRUMENT MANAGEMENT	78	64	14	3,279	3,078	201	4,051	4,051
4.1.2 SYSTEM ENGINEERING	34	-13	47	2,710	2,638	73	2,913	2,913
4.1.4 TRACKER	0	0	0	1,475	1,475	0	1,475	1,475
4.1.7 ELECTRONICS	0	0	0	1,021	1,019	2	1,021	1,021
4.1.A PERFORMANCE & SAFETY ASSUR	0	0	0	263	248	16	263	263
4.1.B INSTRUMENT SCIENCE OPS CENTER	0	0	0	258	257	0	258	258
4.1.D SCIENCE ANALYSIS SOFTWARE	32	20	12	1,303	1,083	220	1,588	1,588
4.1.E SUBORBITAL FLIGHT TEST	0	0	0	460	461	0	460	460
OBSTotals:	144	71	73	10,769	10,258	512	12,029	12,029
DL *** SLAC								
4.1.1 INSTRUMENT MANAGEMENT	93	32	61	14,210	14,185	25	14,496	14,496
4.1.2 SYSTEM ENGINEERING	151	77	74	8,157	8,141	16	9,643	9,643
4.1.4 TRACKER	0	0	0	18,144	18,101	43	18,144	18,144
4.1.5 CALORIMETER	0	0	0	721	718	2	721	721
4.1.6 ANTICOINCIDENCE DETECTOR	0	0	0	685	683	3	685	685
4.1.7 ELECTRONICS	158	44	114	27,849	28,043	-195	28,605	28,605
4.1.8 MECHANICAL SYSTEMS	0	0	0	17,441	17,417	25	17,441	17,441
4.1.9 INTEGRATION & TEST	372	187	185	12,295	11,843	453	14,566	14,566
4.1.A PERFORMANCE & SAFETY ASSUR	47	55	-8	4,766	4,827	-60	5,124	5,124
4.1.B INSTRUMENT SCIENCE OPS CENTER	0	0	0	59	59	0	59	59
4.1.C EDUCATION AND PUBLIC OUTREACH	0	0	0	5	0	5	5	5
OBSTotals:	821	395	426	104,333	104,016	317	109,489	109,489
DS *** SSU								
4.1.C EDUCATION AND PUBLIC OUTREACH	52	38	14	3,473	3,224	249	3,937	3,937
OBSTotals:	52	38	14	3,473	3,224	249	3,937	3,937
Gen. and Admin.	0	0	0	0	0	0	0	0
Undist. Budget								
Sub Total	2,797	759	2,038	176,648	174,824	1,824	186,045	186,045
Contingency							2,010	2,010
Total	2,797	759	2,038	176,648	174,824	1,824	188,055	188,055



FTE Report (DOE/NASA-funded only)

