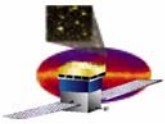


# Project Status

March 2, 2006

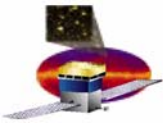
**Lowell A. Klaisner**  
**Project Manager**  
[klaisner@slac.stanford.edu](mailto:klaisner@slac.stanford.edu)  
**650-926-2726**



# Project Status (1 of 2)

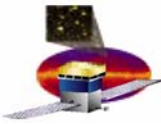
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- **EPU/SIU**
  - RAD 750s from two units inspected by the project and BAE personnel and had complete fillets at the end of the EEPROMS
  - Both are reassembled, tested, and through single access acceptance test vibration
  - The SIU is in the Thermal/VAC chamber
  - Next two inspected on March 6 – schedule on next chart
- **FSW**
  - Version 6.1 loaded onto modules before installation. Has been tested through Power On
    - One issue with read back of ACD high voltage
  - Version 6.2 is loaded on the instrument
    - Enables science runs
  - Version 6.3 is ready
    - Enables run for the record sans GRB and GBM

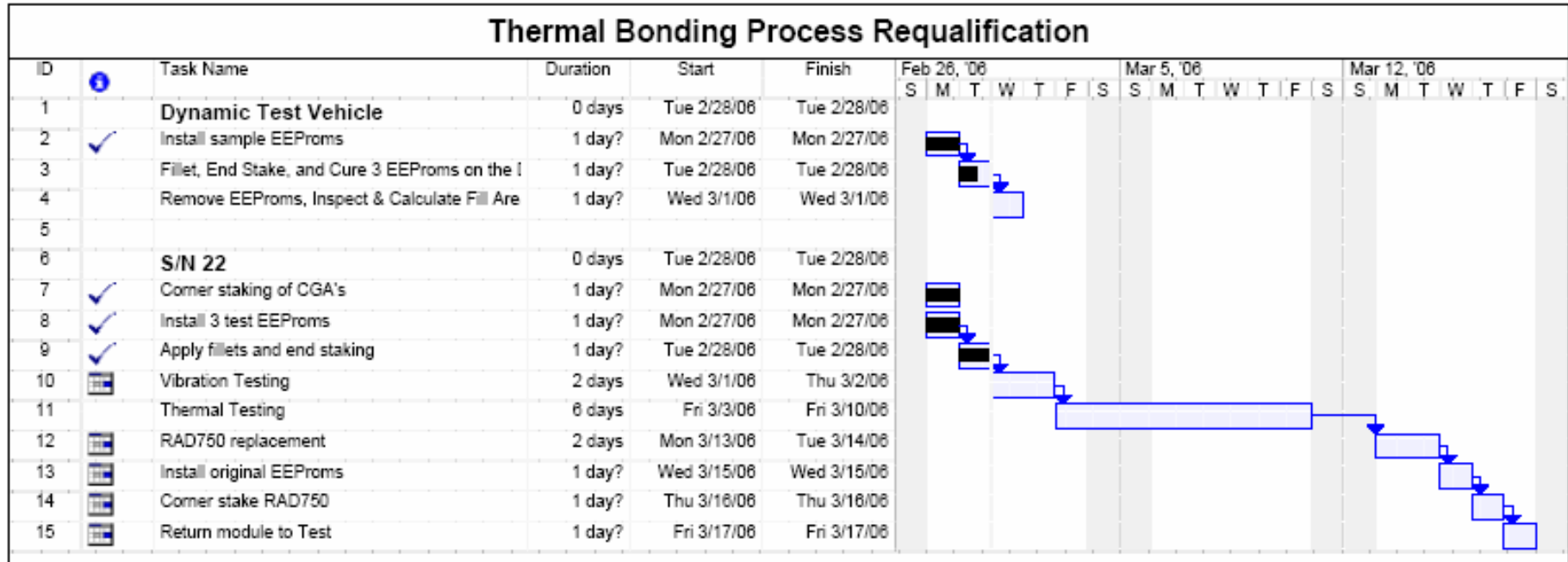


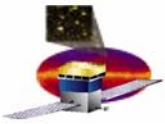
# EPU/SIU Rotation Plan

Test Configuration	Locations Bay	Function	Original Plan***	Step 1 21-Feb	Step 2 6-Mar	Step 3 16-Mar	Flight Configuration 26-Mar
1	11	Primary SIU	2513/14	2513/14		Re-Worked 2513/14	Re-Worked 2513/14
2	7	Redundant SIU	2527/15		Inspected 2527/15	Inspected 2527/15	Inspected 2527/15
1	0	First EPU	2522/17	2522/17		Re-worked 2522/17	Re-worked 2522/17
1,2	3	Second EPU	2523/18	2523/18	2523/18		Re-worked 2523/18
2	12	Cold EPU	2524/13		Inspected 2524/13	Inspected 2524/13	Inspected 2524/13
	In-Rework			2527/15	2513/14		
	In-Rework			2524/13	2522/17	2523/18	
			*** Crate #/RAD750#				
1) Keeps one SIU and two EPUs on the LAT at all times							
2) SIU crates stay SIUs and EPU crates stay EPUs							
3) Spare crates are not used, RAD750 12 & 31							
4) Eliminates need to re-burn surom with bay ID number (all go back to planned location)							
	Unit	Inspection	Vibe	TV	Re-program for flight	Ready for I&T	
	2527/15	21-Feb				6-Mar	
	2524/13	21-Feb				6-Mar	
	2513/14	6-Mar				16-Mar	
	2522/17	6-Mar				16-Mar	
	2523/18	16-Mar				26-Mar	



# BAE Process Requalification

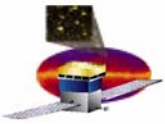




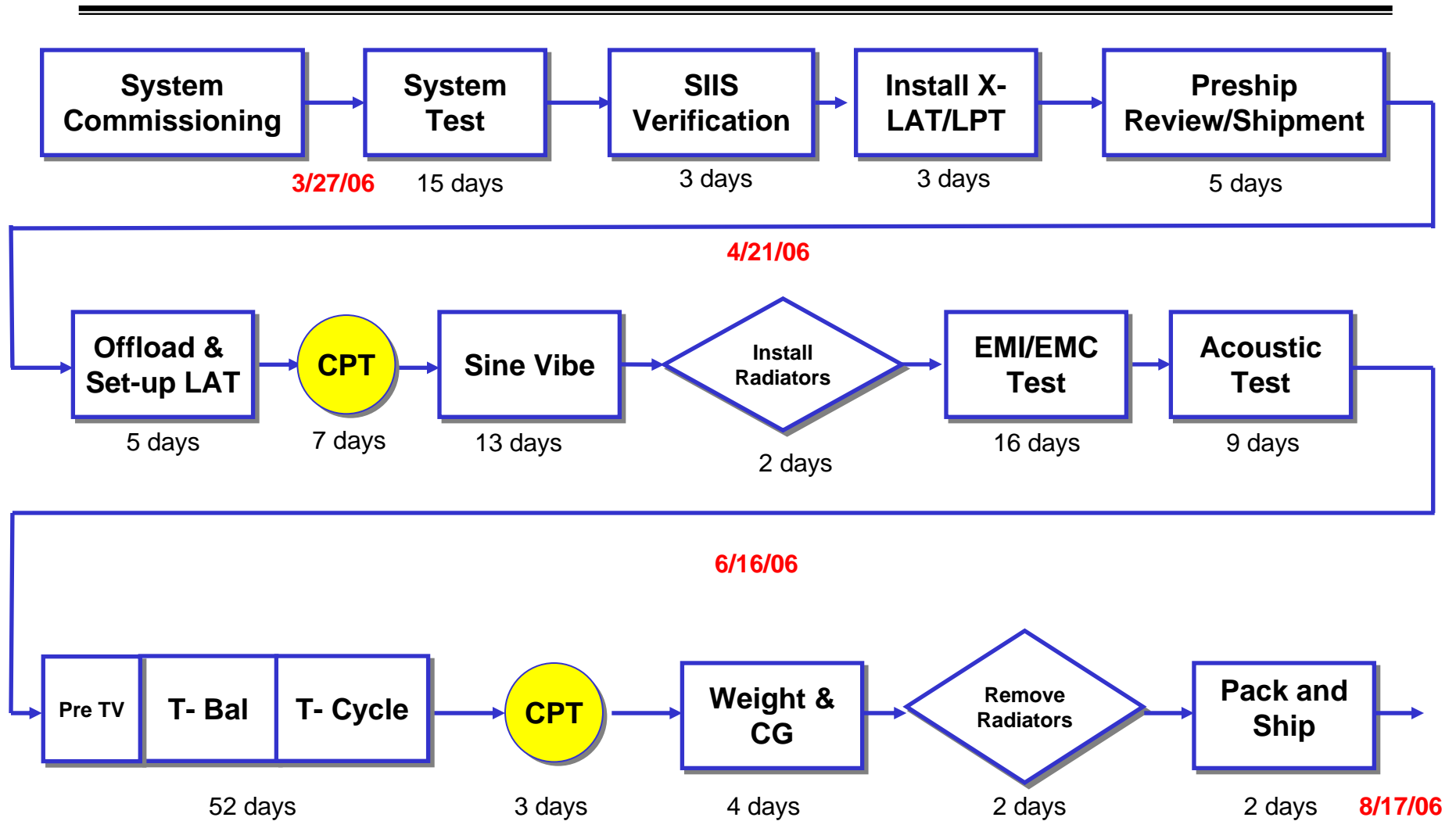
## Project Status (2of2)

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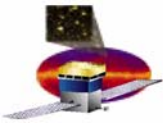
- **LICOS Scripts**
  - Stalled while debugging operation on the instrument
  - Added personnel
    - Philip Hart
    - Amedeo Perazzo
    - Byron Leas
- **Organization**
  - Eric Grove will spend full time at SLAC until shipment to NRL as LAT commissioner
  - Reorganizing Commissioning effort
- **Issues**
  - Making the integrated system work
    - Completing the test scripts



# LAT Test Flow

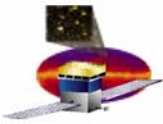


NOTE: Durations for moving and setup have been incorporated into the total duration for the test in calendar days. 5 Days per week except Thermal/Vac which is 24/7



# CCB Actions

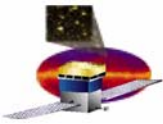
	<u>LAT Project</u> <u>Change Request (CR)</u>	CR No. <b>LAT-XR-07889-01</b>	LEVEL <b>3</b>
ORIGINATOR: Linda Price		PHONE: (650) 926-5197	DATE: 2/1/06
CHANGE TITLE: Stellar Aerospace			
<p><b>Change Description:</b> This change request adds additional budget for the Tracker effort for Stellar Aerospace, Limited. Funds are added for a one month extension to 9/30/05 for five engineers and and a seven month extension to 5/31/06 for one mechanical test engineer. Tasks completed by the five engineers included performing mechanical and quality engineering under the supervision of INFN. The one mechanical test engineer supports the organization and coordination of the GLAST tower environmental tests to be conducted at ALS and the subassembly level environmental tests conducted at INFN facilities in Pisa and Bari.</p>			
	<u>LAT Project</u> <u>Change Request (CR)</u>	CR No. <b>LAT-XR-07712-01</b>	LEVEL <b>3</b>
ORIGINATOR: Linda Price		PHONE: (650) 926-5197	DATE: 2/22/06
CHANGE TITLE: Mechanical Subsystem Closeout			
<p><b>Change Description:</b> All Mechanical Systems hardware has been delivered to I&amp;T for integration into the LAT instrument. A positive cost variance of \$230K will be returned to contingency. Labor and travel budget for the Mechanical subsystem manager through launch will be transferred to the Integration and Test subsystem.</p>			



# Lien List

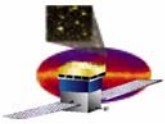
3/1/2006					
LAT Liens					
		FY06	FY07	FY08	TOTAL
4.1.2 Systems Engineering	Subcontract rate increase	\$105	\$105		\$210
	Restore subcontract manpower	\$255			\$255
	Extend Environmental Test Engineers	\$340			\$340
<b>4.1.2 TOTAL</b>		<b>\$700</b>	<b>\$105</b>	<b>\$0</b>	<b>\$805</b>
4.1.9 I&T	Subcontract rate increase	\$50	\$50		\$100
	Extend subcontract Test Director	\$115			\$115
<b>4.1.9 TOTAL</b>		<b>\$165</b>	<b>\$50</b>	<b>\$0</b>	<b>\$215</b>
4.1.A PSA	Extend QA support	\$256			\$256
<b>4.1.A TOTAL</b>		<b>\$256</b>	<b>\$0</b>	<b>\$0</b>	<b>\$256</b>
<b>TOTAL</b>		<b>\$1,121</b>	<b>\$155</b>	<b>\$0</b>	<b>\$1,276</b>
<b>Available Contingency</b>		<b>\$6,248</b>	<b>\$2,668</b>	<b>\$115</b>	<b>\$9,031</b>



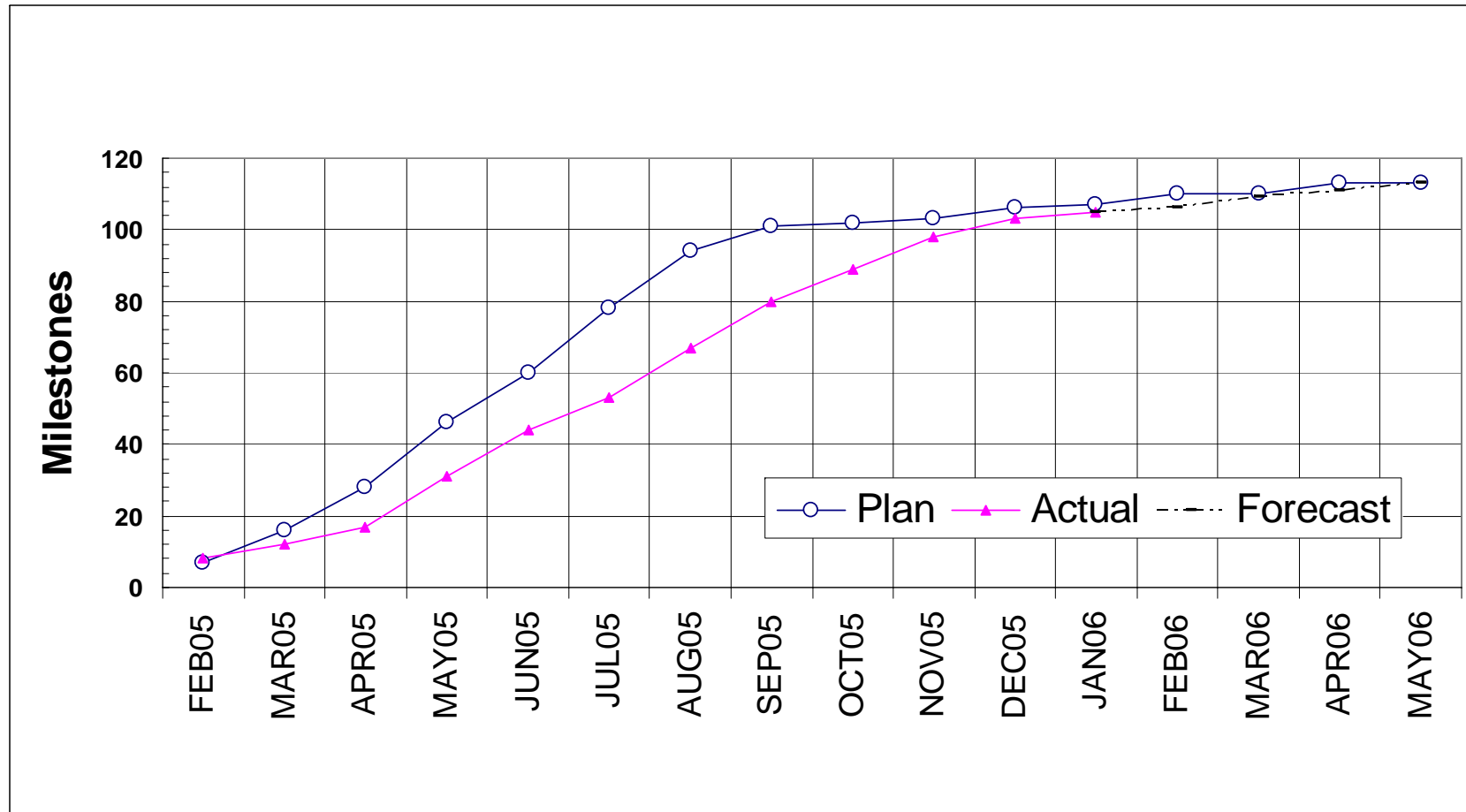


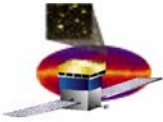
# Baseline

Organization	Funding	Cost thru			FY08	Total
		FY05	FY06	FY07	(1 month)	
<b>GSFC</b>		<b>\$ 20,216</b>	<b>\$ 677</b>	<b>\$ 694</b>	<b>\$ 66</b>	<b>\$ 21,653</b>
	NASA	\$ 20,216	\$ 677	\$ 694	\$ 66	\$ 21,653
<b>HEPL</b>		<b>\$ 8,674</b>	<b>\$ 1,560</b>	<b>\$ 1,682</b>	<b>\$ 113</b>	<b>\$ 12,029</b>
	NASA	\$ 8,674	\$ 1,560	\$ 1,682	\$ 113	\$ 12,029
<b>SLAC</b>		<b>\$ 93,998</b>	<b>\$ 6,493</b>	<b>\$ 4,174</b>	<b>\$ 418</b>	<b>\$ 105,084</b>
	DOE	\$ 42,360	\$ 685	\$ -	\$ -	\$ 43,045
	NASA	\$ 51,224	\$ 5,809	\$ 4,174	\$ 418	\$ 61,625
	Japan	\$ 414	\$ -	\$ -	\$ -	\$ 414
<b>NRL</b>		<b>\$ 27,258</b>	<b>\$ 3,926</b>	<b>\$ 1,307</b>	<b>\$ 163</b>	<b>\$ 32,654</b>
	NASA	\$ 27,258	\$ 3,926	\$ 1,307	\$ 163	\$ 32,654
<b>SSU</b>		<b>\$ 2,654</b>	<b>\$ 625</b>	<b>\$ 608</b>	<b>\$ 50</b>	<b>\$ 3,937</b>
	NASA	\$ 2,654	\$ 625	\$ 608	\$ 50	\$ 3,937
<b>Univ. Wash.</b>		<b>\$ 279</b>	<b>\$ 121</b>	<b>\$ 127</b>	<b>\$ 11</b>	<b>\$ 538</b>
	NASA	\$ 279	\$ 121	\$ 127	\$ 11	\$ 538
<b>TAMUK</b>		<b>\$ 15</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15</b>
	NASA	\$ 15	\$ -	\$ -	\$ -	\$ 15
<b>UC, Santa Cruz</b>		<b>\$ 2,396</b>	<b>\$ 274</b>	<b>\$ 334</b>	<b>\$ 30</b>	<b>\$ 3,034</b>
	DOE	\$ 1,923	\$ (20)	\$ -	\$ -	\$ 1,903
	NASA	\$ 474	\$ 294	\$ 334	\$ 30	\$ 1,131
<b>FPT/Subout</b>		<b>\$ 59</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 59</b>
	DOE	\$ 32	\$ -	\$ -	\$ -	\$ 32
	NASA	\$ 27	\$ -	\$ -	\$ -	\$ 27
<b>Total LAT Cost thru FY05</b>		<b>\$ 155,550</b>	<b>\$ 13,676</b>	<b>\$ 8,926</b>	<b>\$ 851</b>	<b>\$ 179,003</b>
<b>Costs by Fund Type</b>						
	DOE	\$ 44,315	\$ 665	\$ -	\$ -	\$ 44,980
	NASA	\$ 110,821	\$ 13,012	\$ 8,926	\$ 851	\$ 133,610
	Japan	\$ 414	\$ -	\$ -	\$ -	\$ 414
	<b>Total Cost</b>	<b>\$ 155,550</b>	<b>\$ 13,676</b>	<b>\$ 8,926</b>	<b>\$ 851</b>	<b>\$ 179,003</b>
<b>Funding</b>						
	DOE	\$ 45,000	\$ -	\$ -	\$ -	\$ 45,000
	NASA	\$ 111,893	\$ 18,188	\$ 11,594	\$ 966	\$ 142,641
	Japan	\$ 414	\$ -	\$ -	\$ -	\$ 414
	<b>Total Funding</b>	<b>\$ 157,307</b>	<b>\$ 18,188</b>	<b>\$ 11,594</b>	<b>\$ 966</b>	<b>\$ 188,055</b>
DOE Contingency \$		\$ 685	\$ (665)	\$ -	\$ -	\$ 20
NASA Contingency \$		\$ 1,072	\$ 5,176	\$ 2,668	\$ 115	\$ 9,031
Total DOE/NASA Contingency \$		\$ 1,757	\$ 4,512	\$ 2,668	\$ 115	\$ 9,052
<b>NASA Contingency Available</b>		<b>\$ 6,248</b>				



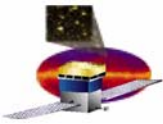
# Level 3 Milestone Count





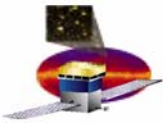
# Level 3 Milestones Completed in January 2006

AV	Activity ID	ND	Activity Description	Baseline Finish	Bsin Var	Early Finish	FY06				
							DEC	JAN	FEB		
<b>Instrument Project Office (Level 3)</b>											
<b>4.1.7 Electronics</b>											
7	1M7941440	9	Final EGSE incl S/C Sim, FSW-Elec to I&T	04/01/05	-195	01/17/06A		▼			
7	1M79610		FSW RFI to I&T	10/03/05	-67	01/17/06A		▼			
Run Date							02/27/06 10:00	GLAST LAT PROJECT		LT-TB: Completed Level 3 by Subsystem	Sheet 1
Data Date							02/01/06	Completed Level 3 Milestones in Reporting Month Sort by Subsystem		FL-TB: Level 3 Milestones compl. last month	
© Primavera Systems, Inc.											



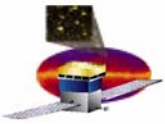
# Level 3 Milestones Completed in February 2006

AV	Activity ID	ND	Activity Description	Baseline Finish	Bsin Var	Early Finish	FY06				
							JAN	FEB	MAR		
<b>Instrument Project Office (Level 3)</b>											
<b>4.1.7 Electronics</b>											
7	1M79630		Release FSW for FQT - Phase 2		0	02/17/06		▽			
7	1M79640		FQT Scripts Complete - Phase 2		0	02/17/06		▽			
<p>Run Date 02/27/06 10:08</p> <p>Data Date 02/01/06</p> <p>© Primavera Systems, Inc.</p>							<p>GLAST LAT PROJECT</p> <p>Level 3 Milestones Completed in February 2006</p> <p>Sort by Subsystem</p>			<p>LT-T9: L3 MS Completed Curr Mo (tb)</p> <p>FL-T2: L3 Milestones Completed Current Month</p>	<p>Sheet 1</p>

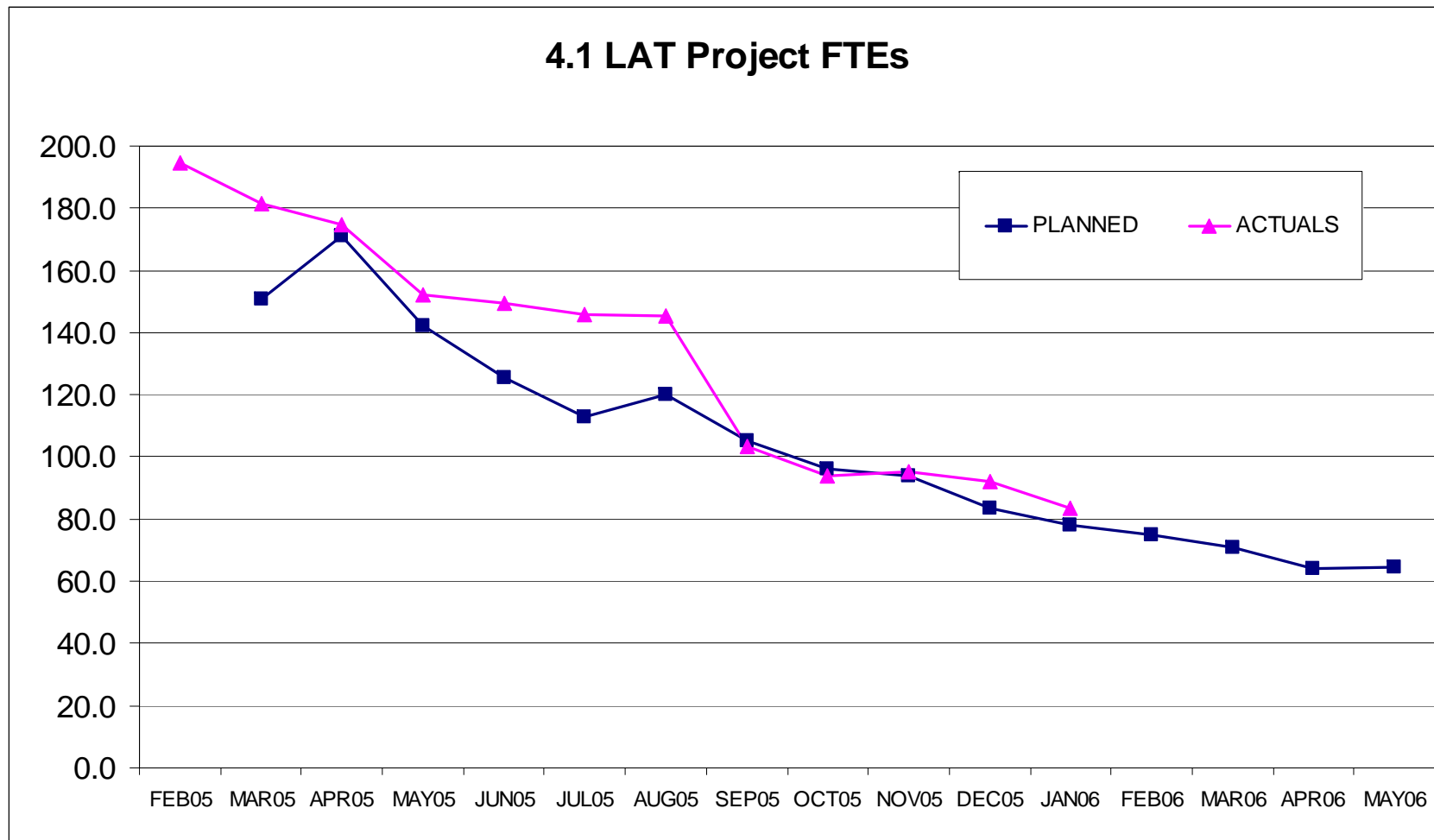


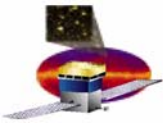
# CPR Level 3

Cost Performance Report - Work Breakdown Structure														
Contractor: Location:						Contract Type/No:			Project Name/No: LAT		Report Period: 12/31/2005 1/31/2006			
Quantity 1		Negotiated Cost 0		Est. Cost Authorized Unpriced Work 0		Tgt. Profit/Fee % 0.00		Tgt. Price 0	Est Price 0	Share Ratio	Contract Ceiling 0	Estimated Contract Ceiling 0		
CAPW[3]  Item (1)		Current Period					Cumulative to Date					At Completion		
		Budgeted Cost		Actual Cost Work Performed (4)	Variance		Budgeted Cost		Actual Cost Work Performed (9)	Variance		Budgeted (12)	Latest Revised Estimate (13)	Variance (14)
		Scheduled Work (2)	Performed Work (3)		Schedule (5)	Cost (6)	Scheduled Work (7)	Performed Work (8)		Schedule (10)	Cost (11)			
4.1.1 INSTRUMENT MANAGEMENT		453	453	275	0	178	19,384	19,384	18,717	0	667	26,656	26,656	0
4.1.2 SYSTEM ENGINEERING		176	176	116	0	60	8,915	8,915	8,998	0	-83	10,575	10,575	0
4.1.4 TRACKER		91	91	74	0	17	21,457	21,457	21,458	0	0	21,486	21,486	0
4.1.5 CALORIMETER		0	0	0	0	0	21,554	21,554	21,553	0	2	21,554	21,554	0
4.1.6 ANTICOINCIDENCE DETECTOR		0	0	0	0	0	18,329	18,329	18,165	0	164	18,329	18,329	0
4.1.7 ELECTRONICS		98	16	277	-82	-261	30,453	30,245	30,376	-208	-131	32,135	32,135	0
4.1.8 MECHANICAL SYSTEMS		-134	-95	54	39	-149	17,382	17,382	17,382	0	0	17,463	17,463	0
4.1.9 INTEGRATION & TEST		415	196	554	-220	-359	11,114	10,385	10,182	-730	202	14,608	14,608	0
4.1.A PERFORMANCE AND SAFETY ASSURANCE		112	112	74	0	38	4,299	4,299	4,246	0	53	5,452	5,452	0
4.1.B LAT INSTRUMENT SCIENCE OPERATIONS CENTER		0	0	0	0	0	317	317	317	0	0	317	317	0
4.1.C EDUCATION AND PUBLIC OUTREACH		52	52	137	0	-85	2,883	2,883	2,596	0	287	3,988	3,988	0
4.1.D SCIENCE ANALYSIS SOFTWARE		80	80	50	0	30	3,245	3,245	3,166	0	79	5,114	5,114	0
4.1.E SUBORBITAL FLIGHT TEST		0	0	0	0	0	1,325	1,325	1,325	0	0	1,325	1,325	0
Gen. and Admin.		0	0	0	0	0	0	0	0	0	0	0	0	0
Undist. Budget												0	0	0
Sub Total		1,343	1,080	1,612	-263	-531	160,657	159,719	158,480	-938	1,239	179,002	179,002	0
Contingency												9,053	9,053	0
Total		1,343	1,080	1,612	-263	-531	160,657	159,719	158,480	-938	1,239	188,055	188,055	0



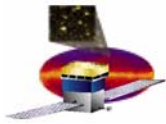
# FTE Report (DOE/NASA-funded only)





# Cost Report

Monthly Contractor Financial Management Report 31-Jan-06						NASA form 533M Approved OMB # 2700-001			Report for Month Ending: 1/31/2006		
To:				From:							
				Contract Value			Cost: 0		Fee: 0		
LAT4				Type:			Contract Number and Latest Definitized Amendment No:			Fund Limitation: 0	
LAT										Billing	
										Invoiced amts billd Total Pys rec'd	
Reporting Category	Cost Incurred/Hours Worked				Estimated Cost/Hours to Complete			4/3/2006 Estimated Final Cost/Hours		Unfilled Orders Outstanding	
	During Month		Cum. to Date		Detail		Balance of Contract	Contractor Estimate	Contract Value		
	Actual	Planned	Actual	Planned	FEB06	MAR06					
4.1.1 INSTRUMENT MANAGEMENT	275	453	18,717	19,384	401	451	7,087	26,656	26,656	99	
4.1.2 SYSTEM ENGINEERING	116	176	8,998	8,915	157	190	1,230	10,575	10,575	0	
4.1.4 TRACKER	74	91	21,458	21,457	29	0	0	21,486	21,486	87	
4.1.5 CALORIMETER	0	0	21,553	21,554	0	0	2	21,554	21,554	0	
4.1.6 ANTICOINCIDENCE DETECTOR	0	0	18,165	18,329	0	0	164	18,329	18,329	0	
4.1.7 ELECTRONICS	277	98	30,376	30,453	98	119	1,542	32,135	32,135	145	
4.1.8 MECHANICAL SYSTEMS	54	-134	17,382	17,382	0	4	76	17,463	17,463	41	
4.1.9 INTEGRATION & TEST	554	415	10,182	11,114	546	412	3,468	14,608	14,608	36	
4.1.A PERFORMANCE AND SAFETY ASSURANCE	74	112	4,246	4,299	106	116	984	5,452	5,452	0	
4.1.B LAT INSTRUMENT SCIENCE OPERATIONS CENTER	0	0	317	317	0	0	0	317	317	0	
4.1.C EDUCATION AND PUBLIC OUTREACH	137	52	2,596	2,883	49	60	1,283	3,988	3,988	155	
4.1.D SCIENCE ANALYSIS SOFTWARE	50	80	3,166	3,245	76	92	1,779	5,114	5,114	0	
4.1.E SUBORBITAL FLIGHT TEST	0	0	1,325	1,325	0	0	0	1,325	1,325	0	
Gen. and Admin.	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>1,612</b>	<b>1,343</b>	<b>158,480</b>	<b>160,657</b>	<b>1,462</b>	<b>1,445</b>	<b>17,615</b>	<b>179,002</b>	<b>179,002</b>	<b>564</b>	



# Performance Analysis

## January 2006 4.1 LAT Project

	WBS	BAC	BCWS	BCWP	ACWP	SV \$	CV \$	% BCWS	% BCWP	% ACWP	SPI Trend	CPI Trend	SPI	CPI	CPI Fcst	CpiSpi Fcst
1	4.1	179,002	160,657	159,719	158,480	-938	1,239	89.75	89.23	88.54	↓	↓	0.994	1.008	177,614	177,726
2	4.1.1	26,656	19,384	19,384	18,717	0	667	72.72	72.72	70.22	↔	↑	1.000	1.036	25,739	25,739
3	4.1.2	10,575	8,915	8,915	8,998	0	-83	84.30	84.30	85.09	↔	↑	1.000	0.991	10,674	10,674
4	4.1.4	21,486	21,457	21,457	21,458	0	0	99.87	99.87	99.87	↔	↑	1.000	1.000	21,486	21,486
5	4.1.5	21,554	21,554	21,554	21,553	0	2	100.00	100.00	99.99	↔	↔	1.000	1.000	21,553	21,553
6	4.1.6	18,329	18,329	18,329	18,165	0	164	100.00	100.00	99.11	↔	↔	1.000	1.009	18,165	18,165
7	4.1.7	32,135	30,453	30,245	30,376	-208	-131	94.76	94.12	94.52	↓	↓	0.993	0.996	32,275	32,288
8	4.1.8	17,463	17,382	17,382	17,382	0	0	99.54	99.54	99.54	↑	↓	1.000	1.000	17,463	17,463
9	4.1.9	14,608	11,114	10,385	10,182	-730	202	76.08	71.09	69.70	↓	↓	0.934	1.020	14,324	14,615
10	4.1.A	5,452	4,299	4,299	4,246	0	53	78.85	78.85	77.88	↔	↑	1.000	1.012	5,385	5,385
11	4.1.B	317	317	317	317	0	0	100.00	100.00	99.92	↔	↔	1.000	1.001	317	317
12	4.1.C	3,988	2,883	2,883	2,596	0	287	72.28	72.28	65.10	↔	↓	1.000	1.110	3,591	3,591
13	4.1.D	5,114	3,245	3,245	3,166	0	79	63.47	63.47	61.91	↔	↑	1.000	1.025	4,989	4,989
14	4.1.E	1,325	1,325	1,325	1,325	0	0	100.00	100.00	99.98	↔	↔	1.000	1.000	1,325	1,325

### LEGEND

BAC: Budget At Complete  
 BCWS: Budgeted Cost of Work Scheduled (to date)  
 BCWP: Budgeted Cost of Work Performed (to date)  
 ACWP: Actual Cost of Work Performed (to date)

SV \$: Schedule Variance = BCWP - BCWS  
 CV \$: Cost Variance = BCWP - ACWP  
 SPI: Schedule Performance Index = BCWP/BCWS  
 CPI: Cost Performance Index = BCWP/ACWP

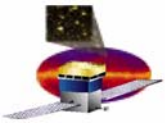
% BCWS: Percent Scheduled = BCWS/BAC  
 % BCWP: Percent Complete = BCWP/BAC  
 % ACWP: Percent Spent = ACWP/BAC

Cpi\_Fcst: CPI (to date) EAC Forecast = BAC / CPI  
 CpiSpi\_Fcst: Combination CPI and SPI EAC Forecast = ACWP + (BAC - BCWP) / (CPI \* SPI)

<span style="color: red;">█</span>	Worse than .85	<span style="color: green;">█</span>	Between .95 and 1.10
<span style="color: yellow;">█</span>	Between .85 and .95	<span style="color: blue;">█</span>	Better than 1.10

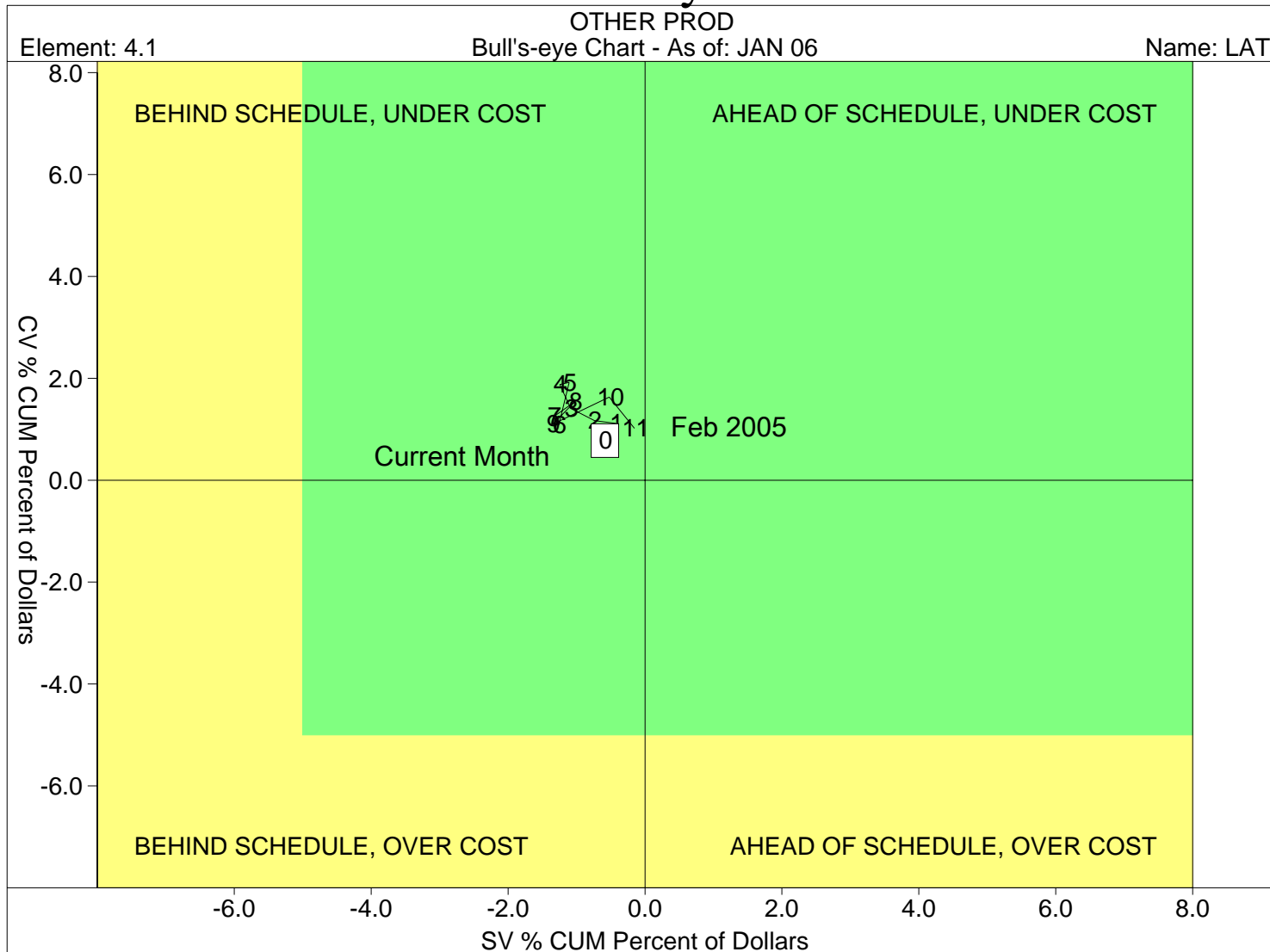
SPI and CPI Change Thresholds

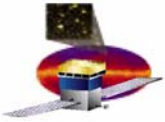




# LAT Project Bull's Eye Chart

## January 2006





# Budget, Cost, Funding, Performance

