


**Gamma-ray Large
Area Space
Telescope**



A vertical banner for the GLAST mission. At the top is the GLAST logo, which consists of the letters 'GLAST' in a stylized, metallic font with a satellite orbiting around them. Below the logo is the text 'Gamma-ray Large Area Space Telescope' in a blue, sans-serif font. The main part of the banner is a colorful image of a gamma-ray background, showing a bright yellow and orange band across the center, with a blue and purple background filled with numerous small, bright spots. At the bottom of the banner is a row of international flags: France, Germany, Italy, Japan, Sweden, and the United States, followed by the NASA logo.

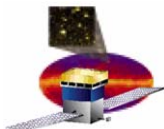
GLAST Large Area Telescope

**GSFC Monthly Review
2 December 2004**

ISIS Development Status

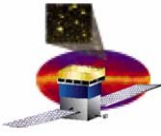
**Jana Thayer
Stanford Linear Accelerator Center**

**jana@slac.stanford.edu
(650) 926-4596**



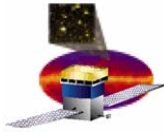
ISIS Progress

- **Hardware delivered**
 - Fully tested
 - Assembled in black enclosure
 - Cables dressed
 - Grounding complete
 - Temperature interlock installed for safety
 - Final checks of hardware and internal cables pending
- **Software build delivered**
 - ITC Command Verification added
 - Fully tested: expect final build by 12/3
- **Documentation (see next slide for details)**
 - See LAT-Docs (preliminary)
 - Documentation essentially complete
 - Documents undergoing internal review this week
- **Test scripts**
 - Progressing...



ISIS Documentation (completed!)

- SPECIFICATIONS/PLANS
 - ❖ LAT-TD-03975: LAT ISIS Requirements Specification
 - ❖ LAT-MD-04086: LAT ISIS Acceptance Test Plan
 - LAT-TD-TBD: LAT ISIS Design Specification (not released yet)
- PROCEDURES
 - LAT-TD-3541: LAT Safe Connection Procedure (Draft – internal review)
 - ❖ LAT-TD-TBD: LAT ISIS Acceptance Test Procedure (Internal review)
- OTHER
 - ❖ LAT-TD-TBD: ISIS FSW Build Description (Internal review)
 - ❖ LAT-TD-02659: FSW Telecommand and Telemetry Formats
- DRAWINGS
 - ❖ LAT-DS-05244: ISIS Enclosure Assembly EGSE
 - ❖ LAT-DS-05297: ISIS Grounding Diagram
 - LAT-DS-04439: ISIS DAQ Hardware Mounting Plate
 - LAT-DS-04440: ISIS GASU Mounting Rail
 - LAT-DS-04441: ISIS PDU Mounting Rail
 - LAT-DS-04461: ISIS Connector Panel +X
 - LAT-DS-04489: ISIS -X Connector Panels
 - LAT-DS-04593: ISIS Temperature Sensor Enclosure
 - LAT-DS-04594: ISIS PDU Test Box Front Panel
 - LAT-DS-04610: ISIS Heater Control Box and VHCP Load Box Mounting and Front Panels
 - LAT-DS-05147: ISIS SIU Adapter Plate EGSE
 - LAT-DS-05235: ISIS Enclosure Blank Panel EGSE
 - LAT-DS-05245: ISIS Enclosure Panel Temp Monitor EGSE



Action items

11/29 (Monday)

- Pre-ITC documentation completed and distributed for internal review. Documents include:
 - ✓ ISIS safe-to-mate
 - ✓ FSW build description
 - ✓ Acceptance test procedures (encompassing completed test scripts)
 - ✓ Mechanical drawings
- ITC command verification completed
- Miscellaneous mechanical issues resolved
 - ✓ Cables dressed
 - ✓ Grounding completed and documented
 - ✓ Temperature interlock installed for safety

12/1 (Wednesday)

- ✓ ITC command verification integrated into ISIS packaged and tested
- Pre-ITC test scripts completed

12/3 (Friday)

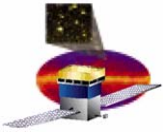
- Review of pre-ITC documentation
- Pre-ITC test scripts fully integrated into documentation
- ISIS build complete

12/8 (Wednesday)

- All documentation complete
- Comments from review integrated into documentation
- Final hardware checks complete
- All test scripts complete

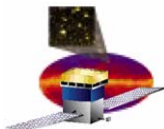
12/13 (Monday)

- Test Readiness Review



ISIS Schedule

- **ISIS Acceptance Test Development**
 - **Schedule driven by test script development**
 - **Stumbling block: decommutation of packets by AstroRT interface**
 - **AstroRT ITOS translation buggy**
 - **Implementing work-around**
 - **SpectrumAstro has been informed of issues**
- **Schedule Concerns**
 - **Test script development slower than expected**
 - **Acceptance test procedures written as test script development completes; lags by 1 day**
 - **Anticipated delivery of SIIS (12/14) impacts schedule**



Schedule

Dec 2004 Dec 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
Internal Review of ISIS documentation/Test Development →						
5	6	7	8	9	10	11
Test Development/Integration of comments →						
12	13	14	15	16	17	18
ISIS TRR → ISIS Acceptance Testing						
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8