GLAST Large Area Telescope

WBS 4.1.D SAS
GSFC Monthly Review

Period Ending: May 2005

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April Accomplishments

**Flight Integration Support**

- Preparing for multi-tower calibrations
- Pipeline stable
  - perl back-end work in test: managing db connections better; allow easier connections between task datasets prior to CCB approval
  - Archiving to tape should be done this week
  - Looking at methods to parallel process long data runs
    - Have multiple batch jobs reconstruct a single digi (raw data) file
    - All elements shown to work; now assemble it all
  - 7 CCB actions and counting
  - Ordered 30 TB unix disk for I&T, MC, DC2 etc support. Should have it in 5 weeks.

**Infrastructure**

- Windows code builds now automated
- Installer now supplies full loads for linux and windows
- Friendly java gui almost ready (primarily for windows)
- Studying JMS java messaging system as inter-communications tool for all the java apps.
- Setting up role-based authentication service to control access/privileges on our web applications.

**LAT DataServer**

- Initial server in test. Analyze pipeline-produced ntuples, applying user cuts; deliver via ftp. Selection by (run, event) coming soon.
  - Want to connect this to eLog for querying I&T data
- Testing concept of putting (ra, dec, energy, time) in relational db and querying that for astro analysis; 2nd query can apply cuts to full (merit) event data.
Upcoming for May

• I&T deliverables
  – Keeping all the balls in the air ;-)  
  – Smooth out calibrations process  
  – Provide initial data server to allow culling of events from pipeline files to be delivered to users for event display etc.

• Gino pipeline functioning
  – Keep testing and supporting it  
  – Start assembling the next version – given input from workshop and experience from Gino

• TkrRecon upgrade
  – tweaks

• CalRecon upgrade
  – Reviewing proposed data structures now in conjunction with TKR folks  
  – Work on clustering just starting  
  – “MIP-segment” finding ongoing at Montpellier  
  – Energy corrections (low and high at LLR/Paris; Berrie Giebels, Philippe Bruel)
Timeline

- **Cal Response/Calibs**
- **Cal Response/Calibs Part Deux**
- **EM2?**
- **Tkr Tower A?**
- **Tkr Tower A in Grid**
- **2 Tower Int?**
- **DC2 planning mtg**
- **Slipped to Jan**
- **DC2**

**Timeline Events**

- **Oct**
- **Nov**
- **Dec**
- **Jan**
- **Feb**
- **Mar**
- **Apr**
- **May**
- **Jun**
- **Jul**
- **Aug**

- SciTools checkup
- Continue Pipeline Debugging
- Main Revamp TkrRecon Complete
- Revamp Start Bkg CalRecon Rejection Complete
- Start Evt Generation
- Start next generation of pipeline; data server
Issues & Concerns

- Nothing urgent – the balls seem to be staying up in the air – at least for now!