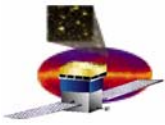


# GLAST Large Area Telescope

**WBS 4.1.D SAS  
GSFC Monthly Review**

**Period Ending: Oct 2004**

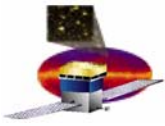
**Richard Dubois  
LAT SAS Subsystem Manager**



# Sept/Oct Accomplishments

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- **Flight Integration Support**
  - Still the main focus!
  - Always preparing stable version of sim/recon
    - Will adopt next version (4) of Root
  - CAL calib algorithms delivered
  - Calibrations user interface ready
  - FRED Event display ready
  - Pipeline works for I&T/svac
    - Still fiddling with it (as we will for a long time)
- **Instituted new Wiki system (Confluence) – from the folks who make JIRA**
  - Handy web authoring tool with lots of features for collaborative work
  - Tried it out for ScienceTools checkout
    - Still plenty to learn on how best to use it
- **MRvcmt in use**
  - gui for code builds
- **User Workbook building up steam**
- **Automated code and external binary distributions almost in place**
  - Linux installer in use
  - Windows side for external libraries
    - Full code awaiting automated code builds on windows



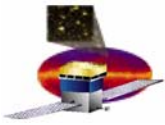
# Science tools checkout

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- For evaluating the science tools, especially the new functionality that is under development for DC2
  - 3-week period, October 11-29 (first working distribution was on the 15<sup>th</sup>, after fixing problems building some late additions, and debugging the new linuxInstaller script)
  - Evaluators (LAT team + GSSC) agreed to try the tools in one or more analysis area
    - General tools, Observation simulation, Likelihood, Pulsar\*, and GRB\*
  - Most of the 15 evaluators have been heard from
- Roughest edges were with Pulsar sources and analysis
  - The timing issues, e.g., correction for orbital motion, are subtle
- Lots of feedback, too, was received on user interaction with the tools
- No show stoppers were found, although clearly the feedback from the science tools checkout was worth the effort
  - A summary of the results, with links to the details, is at

\* New capabilities for DC2

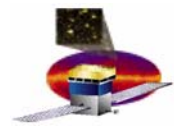
[http://www-glast.slac.stanford.edu/ScienceTools/reviews/checkout1/brief\\_summary.htm](http://www-glast.slac.stanford.edu/ScienceTools/reviews/checkout1/brief_summary.htm)



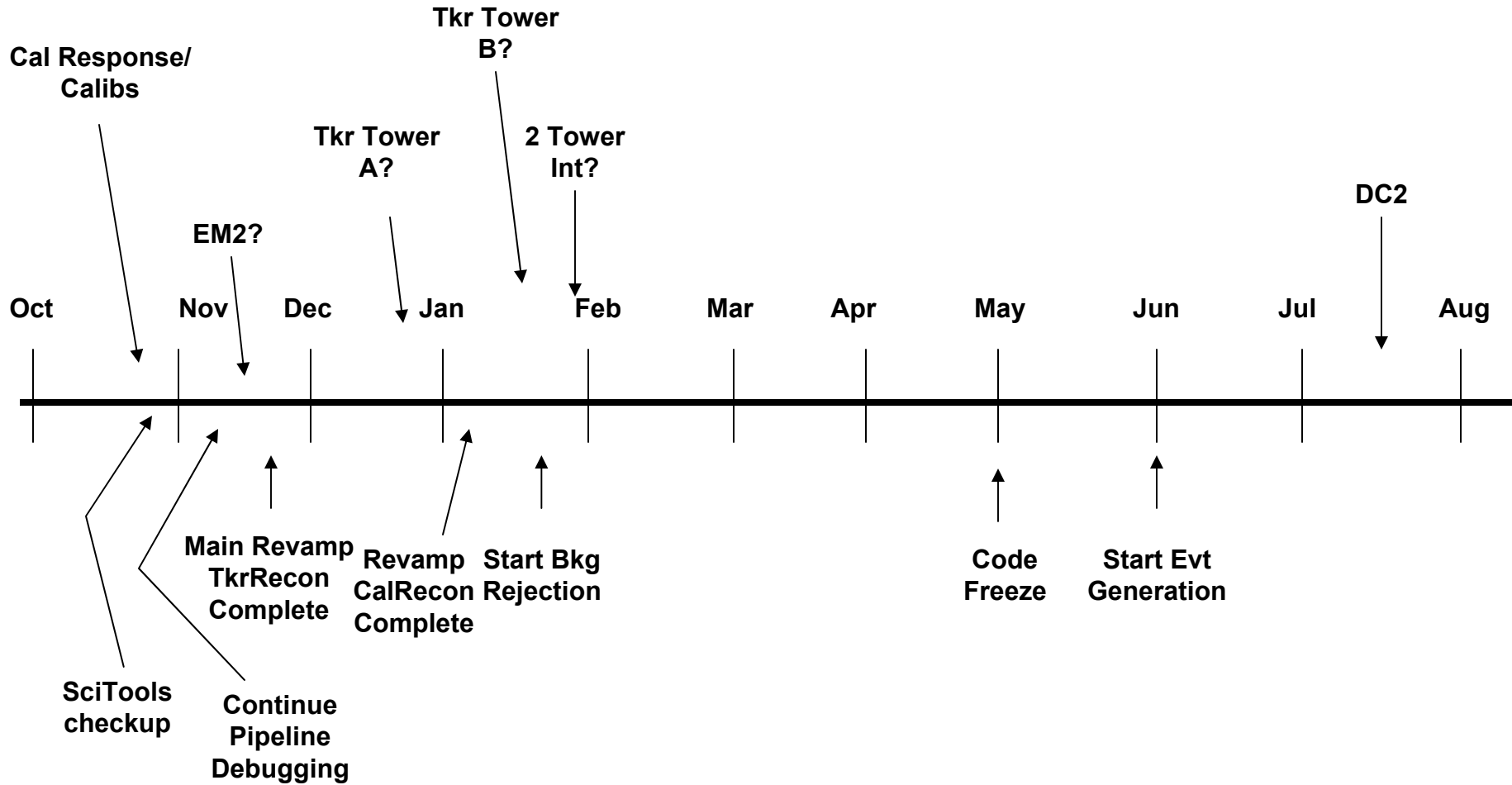
# Upcoming for November

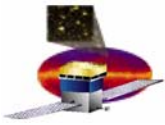
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- **I&T deliverables**
  - Keep working on TKR Tot
  - Work on more sophisticated CAL calibrations based on what's been learned during assembly at NRL
- **Gino pipeline functioning**
  - Keep testing it
  - Debugging on I&T/svac needs.
    - Recent speedbumps when I&T task names got too long
    - SLAC batch system having troubles closing out log files in last week – working with SCS batch czar on it
  - Working on pipeline configuration ergonomics
    - upload from file just added – being tested
    - Editing from web in the works – including cloning from existing tasks
  - Next up is trying out MC for DC2 style generation to check it out
- **TkrRecon upgrade**
  - Time for another cleanup iteration after a couple of years' experience
  - Will allow for selecting particle hypothesis
    - Tell it we have (surface) muons for flight integration
  - Probably our last chance for a big revamp
- **CalRecon upgrade (Nov-Jan probably)**
  - Code has not been rethought in > 2 yrs
  - Need to account for what's been learned in energy correction techniques etc
  - Add clustering and “MIP-segment” finding
- **Start Plotting DC2**
  - Julie McEnery will be coordinating the steering committee
- **Send out req for Infrastructure position**



# Timeline

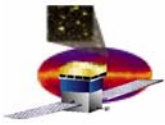




# Key Milestones

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- ❑ **Start of Flight Integration – Jan 2005**
- ❑ **File transfer test with GSSC/ISOC – Jan 2005**
- ❑ **Mission GRT1 – Feb 2005**
- ❑ **DC2 – July 2005**



# Issues & Concerns

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- ❑ I&T support has been heavy load
  - ❑ Hardware will start arriving sometime... all our pieces have to be in place.
- ❑ Start thinking about DC2 – must juggle I&T support with DC schedule