



GLAST Large Area Telescope

WBS 4.1.D SAS
GSFC Monthly Review

Period Ending: Aug 2003

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Aug Accomplishments

Continued preparations for Data Challenge 1
Onboard filter code now embedded in full sim/recon; under test.
Updated sky model; nearly ready with machinery to generate day's data
First version of exposure output under test
Finished preparations for CAL EM data; awaiting real data real soon
now.
Continued validation of GEANT4
First crack at revised EM tests done
Building machinery for inclusion in system tests
Ground Systems Requirements document review with Mike Rackley et
al
Hired replacement SciProg at SLAC. Has started already.



Issues & Concerns

- No significant technical threat at this time
- ☐ Awaiting CAL EM data
 - ☐ Usually some scrambling to ensure proper decoding into ground system
 - □ Having done TKR already makes it easier 2nd time around
- Schedule threat averted
 - CDR moved to April 2004
 - Avoid overlap of DC1 and CDR. Phew!



Software Testing Update

- documentation and coding reviews enforce coding rules
 - Held review of Onboard Filter (in ground code)
- "Continuous integration"
 - Science Tools nightly builds added back in to the system
- Continuing effort with SLAC to validate GEANT4 EM physics
- Data Challenge
 - performance evaluation tests sim/recon in great detail.
 - Stress test data production capabilities
 - Try first connections to SSC with DTS



Key Milestones

- □ Data Challenge 1 Kickoff at Rome Collaboration meeting Sept 2003
 - Preliminary instrument response functions ready
 - Should have PSF, backgrounds analysis ready 9/15. Then work on IRF parameterization.
- □ Start DC1 Analysis effort December 2003 (closeout Feb 2004)
 - · Tight schedule to demonstrate OPUS pipeline. We have a fallback position
 - Start processing 400M events in late November
 - □ We have set mid-Oct to mid-Nov as float to get it all together
- □ SAS Subsystem CDR April 2004
- Participate in the Mission Ground Readiness Testing
 - GRT# 1-4: SAS ready by August 2004
 - GRT# 5-7: SAS ready by September 2005