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