GLAST Large Area Telescope:

LAT System Engineering

Pat Hascall
SLAC
System Engineering Manager

hascallp@slac.stanford.edu
650-926-4266

Topics

- **Meeting goals**
  - Review Tracker test matrix to assess and capture implementation issues
  - Review strategy for multi tower CPT and LPT to address likely need to reduce test time
  - Review discussion topics from test cross reference matrix and develop plan to close outstanding issues
- **Team Goals**
  - Define test requirements necessary through December
    - Tracker and Cal post delivery tests
    - Cal tests post integration with TEM and TEM/PS
    - Tower integration tests
    - Multi tower tests (without 'final' flight software)
    - Third layer boxes tests as necessary
  - Testing with next delivery of flight software, all third layer boxes and ACD will be defined in the next phases

Test Cross-Reference Matrix Issues

- The timing in tests are covered by the trigger test suite
  - info only
- The TOT testing is done in TE206 Readout sequence with charge injection scan. May want to split into another test to simplify picking tests for LPT
  - Larry to assess and provide recommendation
- Do we need any of the FSW tests?
  - Larry, Pat and Ric to assess and provide recommendation
- Need to call out ELX EM box integration tests the first time they are used (e.g. first time EM GASU is used, should run full suite of GASU integration tests)
  - Pat to correct matrix

Test Cross-Reference Matrix Issues (Contd)

- There may be analytical differences based on how the data is taken (cal only or cal and tracker for the same test)
  - Larry, Pat and Eduardo to assess and provide recommendation
- Need to correlate test phases along the top with those in the assembly plan - some are changed
  - Pat to correct matrix
- Need to address redundancy
  - Pat and Larry to assess and provide recommendation

For Next Week

- Hiro to present cut at LPT for the Tracker
- Larry to present degree of parallelism achievable for tracker testing
- Eduardo to check SVAC plan and reconcile requirements for two tower tests