GLAST Large Area Telescope

Gamma-ray Large Area Space Telescope

Systems Engineering

NCRs and Waivers Verification Status

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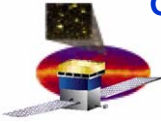
LAT Functional Test Status

- **The LAT functional test status**
  - **Current liens include:**
    - **6 Cal and tracker tests did not have data due to playback problems**
      - **Retest on 2/7 completed 5 of the files, review in process**
    - **One checksum error during a file upload that is still under investigation**
      - **Additional checksum error during retest (different run)**
      - **Retest for that run in work**
- **Flag status**
  - **Nearly complete on flag closure**
    - **222 were opened (many duplicates)**
    - **4 still open**
      - **Checksum error**
      - **Limit check caused by script timing – fix in process**
   - **2 on spacecraft side (PTP lockup, SSR dump problems)**
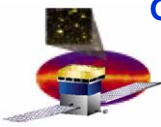
NCR Summary Status

| Closure Plan	Definition	Count
Issue resolved, closure plan in place or no impact to LAT		
Closing	Issue resolved, documentation required to close	1
Closure deferred	EGSE issues, low priority to fix or hold open to track repeats	8
Work continuing		
B1.0.0	Resolved with FSW release B1.0.0 or later	2
QAR	CND or other issue expected to be transferred to a QAR	9
In process	Investigation ongoing	5
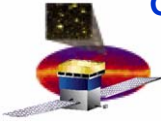
Status of NCRs Promoted to QARs

Open NCR	Corresponding QAR	Description	Resolution
880, 881, 902, 948, 949	1196-4894	EPU, SIU Reboots	CND, hold open
942	1196-4895	+X, -X LAT blanket replacement and final closeout	Close post TV at final closeout
946	1196-4876	ACD FREE board 5 power up	CND, hold open
855, 894	1196-4894	LATC verify and dump errors	CND, hold open
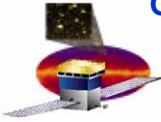
NCR Progress

- **NCRs in process**
  - **NCR 922 LKH stopped**
    - **Root cause is likely decrementer interrupt issue**
    - **JIRA FSW-847 prevents LHK lockup in response**
  - **NCR 975 EPU timetag 4.2 seconds fast and NCR 989 SIU timetag 4.2 seconds fast**
    - **Covered in JIRA FSW-744 and FSW-802**
    - **Cause identified by E. Siskind and replicated on test bed**
  - **NCR 983 LTC file size changed**
    - **New LTC files generated and in FMX, still need to integrate with script/MOOT**
    - **Needed before TV**
  - **NCR 990 Watchdog timer**
    - **Script change to accommodate watchdog timer settings has been identified**
- **NCRs closing**
  - **NCR 992 (TEM phasing errors)**
    - **LAT work is done, still need changes to on-line analysis**
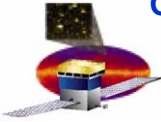
LAT Level Verification Status

Category	Verification Method					Totals	
	Test	Demo	Analysis	Inspection	Children	Totals	
	# Comp	# Comp	# Comp	# Comp	# Comp	Complete	% Comp
Requirement Identified	120	72	208	36	22	458	100.0%
Flow Down Complete	120	72	208	36	22	458	100.0%
Draft Verification Plans	120	72	208	36	22	458	100.0%
Final Verification Plans	120	72	208	36	22	458	100.0%
Verification Plans Executed	86	63	165	22	13	349	76.2%
Verification Reports Submitted	86	55	165	22	13	341	74.5%
Requirements Sold	83	51	150	21	12	317	69.2%
Expect Compliance	16	0	22	12	1	51	11.1%
Verifications Plan Deferred	18	9	19	2	8	56	12.2%
Requirements Issues	0	0	2	0	0	2	0.4%
Total VPs	120	72	208	36	22	458	

- **Progress this month**
  - **All 458 VPs are Final**
  - **All VPs planned for execution to this point have been performed**
    - **349 VPs have been executed to date**
- **Status**
  - **VCRM version 24 released**
  - **All deferred GRB reqts will be sold post FSW B1.0 installation**