

SVAC And Calibrations Of The Full LAT



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Science Verification, Analysis and Calibrations

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Test Planning Meeting, September 26, 2005

SVAC Until NRL

GLAST LAT Project

LAT Planning Meeting 9/21/2005



I&T Summary Plan

LAT Final Test Prep Schedule Rev. 9/13/05 L.Wai

| Detector Modules Installation | 9/12-9/17 | 9/19-9/24 | 9/26-10/1 | 10/3-10/7 | 10/10-10/15 | 10/17-10/22 | 10/24-10/29 | 10/31-11/5 | 11/7-11/12 |
|---------------------------------|---|--|---|---|--|---|---|---|--|
| Receive/prep modules for 4 bays | | | | | | | | | |
| Install bays 10,11,14,15 | | | | | | | | | |
| 12-bay LAT CPT (TKR & CAL) | | | | | | | | | |
| Receive/prep modules for 4 bays | | | | | | | | | |
| Install bays 6,7,2,3 | | | | | | | | | |
| 16-bay LAT CPT (TKR & CAL) | | | | | | | | | |
| ACD/GASU/PDU Integration | | | | | | | | | |
| LATTE4 LAT CPT, trigger, SVAC | | | | | | | | | |
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| LICOS/FSW Installation | 10/31-11/5 | 11/7-11/12 | 11/14-11/19 | 11/21-11/26 | 11/28-12/3 | 12/5-12/10 | 12/12-12/17 | | |
| Mobile rack assembly & test | | | | | | | | | |
| ESW EGSE installation | | | | | | | | | |
| LICOS installation | | | | | | | | | |
| LICOS LAT CPT, SVAC, E/E | | | | | | | | | |
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| Pre-Ship Test | | | | 12/19-12/24 | 12/26-12/31 | 1/2-1/7 | 1/9-1/14 | 1/16-1/21 | 1/23-1/28 |
| Flight SIU installation | | | | | | | | | |
| Cross-LAT plate installation | | | | | | | | | |
| Light-tight tests | | | | | | | | | |
| LICOS LAT CPT, SVAC, E2E | | | | | | | | | |
| Pre-Ship Review | | | | | | | | | |
| Ship to NRL | | | | | | | | | |
| Post-Ship Test | | | | | | | | | |
| Post-Ship Review | | | | | | | | | |
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| | Detector Modules Installation Receive/prep modules for 4 bays Install bays 10, 11, 14, 15 12-bay LAT CPT (TKR & CAL) Receive/prep modules for 4 bays Install bays 6, 7, 2, 3 16-bay LAT CPT (TKR & CAL) ACD/GASU/PDU Integration TATTE4 LAT CPT, trigger, SVAC LICOS/FSW Installation Mobile rack assembly & test E&W EGSE installation LICOS installation LICOS LAT CPT, SVAC, F/E Pre-Ship Test Flight SIU installation Light-tight tests LICOS LAT CPT, SVAC, E2E Pre-Ship Test Flight SIU installation Light-tight tests LICOS LAT CPT, SVAC, E2E Pre-Ship Test Post-Ship Test Post-Ship Test Post-Ship Test Post-Ship Review | Detector Modules Installation 9/12-9/17 Receive/prep modules for 4 bays Install bays 10, 11, 14, 15 12-bay LAT CPT (TKR & CAL) Receive/prep modules for 4 bays Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 16-bay LAT CPT (TKR & CAL) ACD/GASU/PDU Integration TATTE4 LAT CPT, trigger, SVAC Installation LICOS/FSW Installation 10/31-11/5 Mobile rack assembly & test ESW EGSE installation LICOS installation IICOS installation LICOS LAT CPT, SVAC, F/E IICOS LAT CPT, SVAC, EZE Pre-Ship Test IICOS LAT CPT, SVAC, EZE Pre-Ship Review Ship to NRL Post-Ship Test Post-Ship Review | Detector Modules Installation 9/12-9/17 9/19-9/24 Receive/prep modules for 4 bays | Detector Modules Installation 9/12-9/17 9/19-9/24 9/26-10/1 Receive/prep modules for 4 bays Install bays 10,11,14,15 Install bays 10,11,14,15 Install bays 10,11,14,15 12-bay LAT CPT (TKR & CAL) Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 16-bay LAT CPT (TKR & CAL) Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 16-bay LAT CPT (TKR & CAL) Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 16-bay LAT CPT (TKR & CAL) Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 16-bay LAT CPT (TKR & CAL) Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 Install bays 6,7,2,3 LICOS/FSW Installation Install bays 6,7,2,4 Install bays 6,7,2,4 Install bays 6,7,2,4 Mobile rack assembly & test Install bays 6,7,2,4 Install bays 6,7,4 Install bays 6,7,4 Pre-Ship Test | Detector Modules Installation 9/12-9/17 9/19-9/24 9/26-10/1 10/3-10/7 Receive/prep modules for 4 bays Install bays 10, 11, 14, 15 Install bays 10, 11, 14, 15 Install bays 10, 11, 14, 15 12-bay LAT CPT (TKR & CAL) Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 Install bays 6, 7, 2, 3 LICOS/FSW Installation 10/31-11/5 11/7-11/12 11/14-11/19 11/21-11/26 Mobile rack assembly & test Installation Installation Installation LICOS Installation Installation Installation Installation LICOS IAT CPT, SVAC, E2E Installation Installation Installation Light tight t | Detector Modules Installation 9/12-9/17 9/19-9/24 9/26-10/1 10/3-10/7 10/10-10/15 Receive/prep modules for 4 bays | Detector Modules Installation 9/12-9/17 9/19-9/24 9/26-10/1 10/3-10/7 10/10-10/15 10/17-10/22 Receive/prep modules for 4 bays | Detector Modules Installation 9/12-9/17 9/19-9/24 9/26-10/1 10/10-10/15 10/17-10/22 10/24-10/29 Receive/prep modules for 4 bays | Detector Modules Installation 9/12-9/17 9/19-9/24 9/26-10/1 10/3-10/7 10/10-10/15 10/17-10/22 10/24-10/29 10/31-11/5 Receive/prep modules for 4 bays Image: Addition of the addition of th |

4.1.9 - Integration and Test

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Test Planning Meeting, September 26, 2005 SVAC Until NRL

- **Step1:** LATTE 4 LAT CPT, trigger timing, calibrations:
 - 10/31 11/12
 - Topic for today!
- Step 2: SVAC (pipeline) must be able to handle LICOS and FSW data products and procedures as they come along.
- Step 3: LICOS LAT CPT, SVAC
 - **11/28 12/17**
 - Must define a muon run:
 - We know FSW/Online priority is on charge injection at this stage.
- Step 4: LICOS LAT CPT, SVAC E2E:
 - 12/26 1/14
 - Working on updating the plan:
 - LAT-MD-00575
 - Will be presented in a later meeting.



- Calibrations include certain SVAC runs!
 - B13 (15 min)
 - B10 (15h)
- We also want:
 - B2 (4h) Flight mode
- CAL and TKR calibrations should be like for 8 towers.
- ACD is part of SVAC run configuration in the Matrix:
 - ACD will not be in the trigger!
 - We will have no ROIs!
 - Will use the ACD configured as delivered:
 - Nominal values for thresholds etc
 - Only explicit ACD threshold in the Matrix is the CNO threshold:
 - Lester has updated it from 1 to 7.7 MIPs (min value)
- ACD offline calibration does not require any additional data beyond the usual B13, B10 and B2 runs.
- CalibGenACD:
 - Offline code for ACD calibrations Under development!