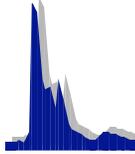




GLAST Burst Monitor (GBM)

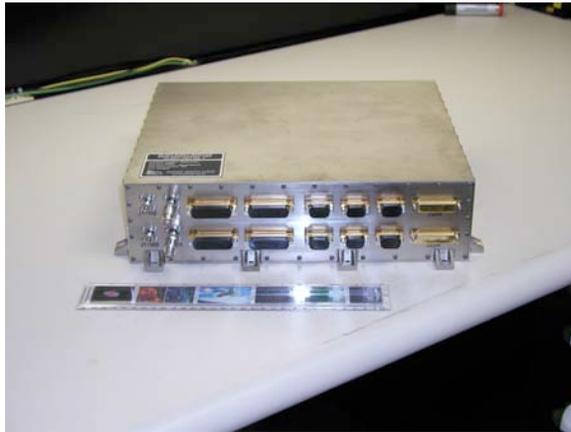
Chip Meegan
NASA/MSFC



Status

- ✦ The Flight Data Processing Unit was delivered to MSFC on April 1.
- ✦ The first flight detectors (spares) were delivered from MPE to MSFC last week.
- ✦ Flight Software Build 1 complete; Build 2 (final build) several weeks from completion.
- ✦ Shock test failure is resolved – shock absorbing sleeves will be added to mounting

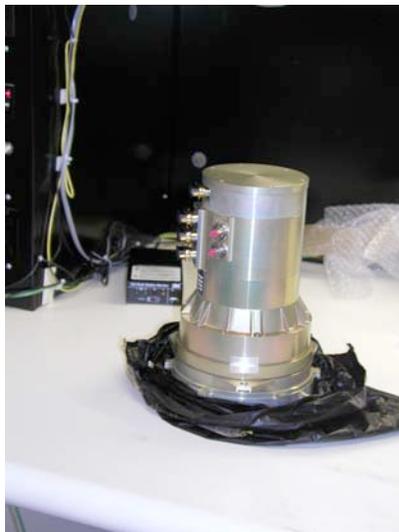
GBM Hardware Deliveries



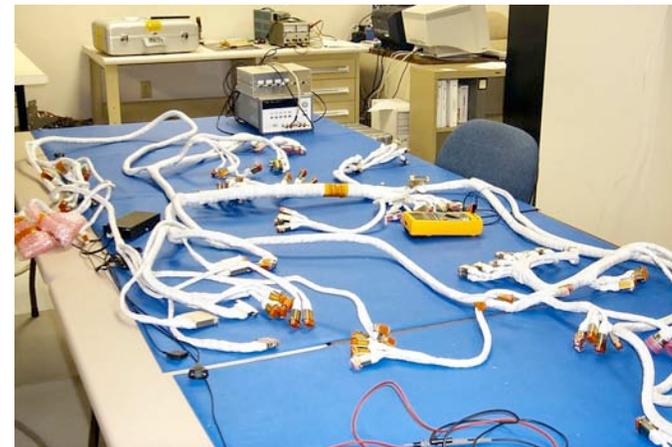
Data Processing Unit



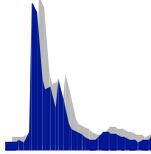
BGO Detector



NaI Detector

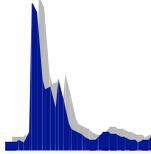


Flight-like cable harness



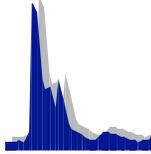
Issues

- ✦ EMI violations at receiver frequencies; we think we have a fix and will test next week.
- ✦ Uncertainty in response at low energy.



Low Energy Sensitivity

- ✦ Level II requirement for energy range minimum of 10 keV.
- ✦ Level III requirement to have 100 cm² effective area at 14 keV (80% efficiency).
- ✦ Silicone pad cushion is main source of absorption.
- ✦ Calculations indicated effective area of ~75 cm².
- ✦ Absorption measurements of entrance window indicated effective area of ~100 cm².
- ✦ Absolute measurement of detector efficiency indicates effective area of ~50 cm².
- ✦ Discrepancy under investigation.



Schedule

- ✦ Interface testing of EQMs and DPU this week.
- ✦ Flight Power Supply Box completed by end of this month; delivered to MSFC August 10.
- ✦ All remaining detectors delivered by September 26 (probably earlier).
- ✦ Pre-environmental review at MSFC November 21.
- ✦ Delivery to spacecraft integration March 16, 2006.
- ✦ Critical path is flight software (to complete testing before environmental testing at MSFC).



BWG Telecon on Solar Flares

- ✦ Held May 19 to discuss repointing to solar flares
- ✦ BWG + Jim Ryan, Gofried Kanbach, Gerry Share
- ✦ Points raised:
 - Need to simulate instrument response to SFs.
 - GBM trigger classification reliability.
 - Include flare in Data Challenge 2.
 - Different repoint algorithm for SFs vs. GRBs.
 - LAT Solar System Science Team is focal point for SF issues.
 - May get ToO requests for several day observations.