

Gamma-Ray Burst / Solar Flare Team: Summary
GLAST LAT Collaboration Meeting
October 23-24, 2002

Topic

Assignee

Miscellaneous

1. Consider Joint LAT & GBM GRB catalog

C. Meegan, SWG/GRB team

A. GRB Simulations

1. Simulate intense solar flare:
what measure(s) might the LAT take to reduce trigger rate,
while preserving science

N. Omodei

2. How to employ ACD during intense flare

G. Share, JJ Russell

3. Dead-time estimation

Provide & analyze detected GRB photon arrival times
for set of bright GRBs

J. Bonnell, JJ Russell

4. Realistic On-board GRB Simulations (for max. effective area):

Background decimation:

Which on-board filters should/can be relaxed during GRBs ?

Energies \lesssim 30 MeV

Energies \gtrsim 1 GeV (esp., "CAL-only supplement" \sim 40%)

B. On-board LAT GRB Trigger & C. LAT GRB Alert

1. Deliver Bayesian Block algorithm to GBM team,
interactive support for on-board implementation

J. Norris, M. Briggs

2. “C” (?) algorithms to utilize
GBM temporal information and
GBM spatial information
for ID of LAT photons

J. Norris
N. Omodei

3. “C” (?) algorithms to generate
On-board LAT GRB localization
At-MOC LAT GRB localization

Who?
Who?

4. Define all operational modes for GRB triggers, alerts.

GBM reps, LAT reps, R. Cox

D. Communications with Flight & Ground SW Groups

M. Briggs, JJ Russell, R. Cox, J. Norris

1. On-board Processing Goals:
Minimalist communications in prompt & delayed alert
(GBM → S/C → LAT → Ground)
Minimalist algorithms
Maximum GRB science

E. GRB Physical Model

1. Maintain flexibility of model, allowing variants

N. Omodei

F. GRBs & Quantum Gravity

1. GRBs still an interesting tool for probing QG