



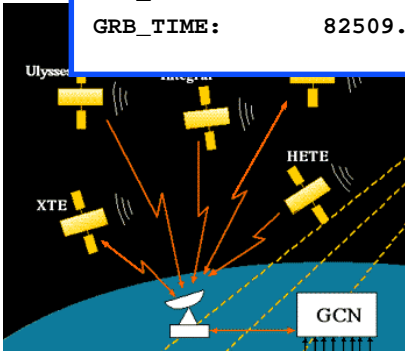
GRB Control Room Notification during S3

(R. Rahkola, D. Barker)

Re-cap from the LSC meeting

```

Date: Thu, 8 May 2003 18:55:58 -0400
From: Bacodine <vxw@capella.gsfc.nasa.gov>
To: sn@ligo.caltech.edu
Subject: GCN/HETE_POSITION
TITLE:          GCN/HETE BURST POSITION NOTICE
NOTICE_DATE:    Thu 08 May 03 22:55:45 UT
NOTICE_TYPE:    HETE S/C_Alert
TRIGGER_NUM:    2705,  Seq_Num: 1
GRB_DATE:       12767 TJD;  128 DOY;  03/05/08
GRB_TIME:       82509.54 SOD {22:55:09.54} UT
    
```



event_type
 event_start
 "stand down" time

acrux.ligo.caltech.edu

(email handling / parsing)

- ❑ Check event time with current time
- ❑ Scrap test emails, emails which arrive too late, etc.

TCP/IP

london (LLO server)

TCP/IP

red (LHO server)

- ❑ Get event timestamps, type
- ❑ Set EPICS records
- ❑ Trigger EPICS alarm
- ❑ Write event to log file (continuously running)



Current Status

□ Turned on ~00:00 12/10 UTC

- First trigger five hours later
- Received 15 different alerts during the next 30 days
- Only 1 turned out to be a real burst!

HETE has several false alarms (of 86 triggers during S3, only 18 were real); also, not all HETE events are distributed (e.g. X-ray Flashes, low SNR, etc.)



□ Stopped once ~12/25 12:05 UTC

- Normally restarted automatically; not this time!
- Due to the holidays, did not get restarted until 1/2 06:40 UTC !
- No triggers in the meantime (whew!)



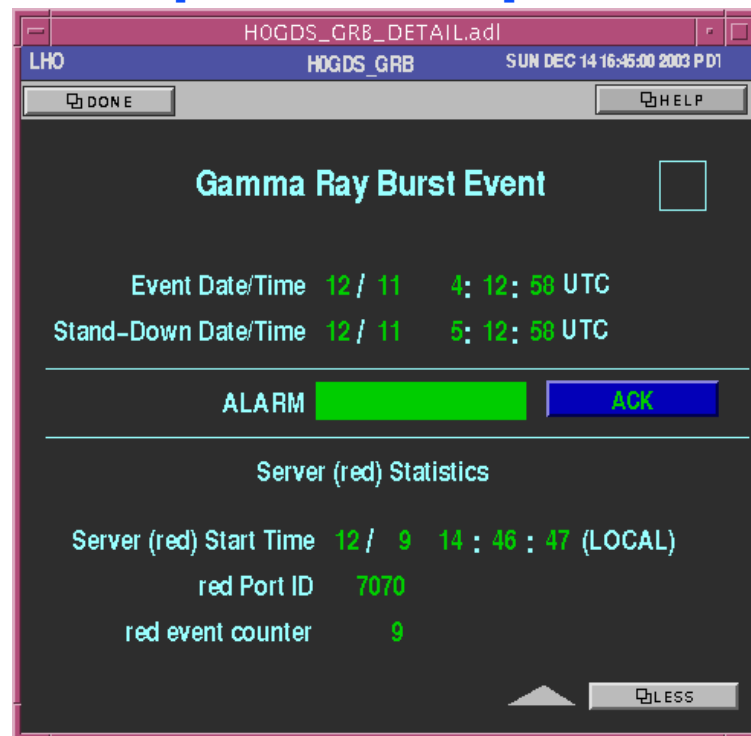
□ 10 different mentions in the e-log

- Presumably did keep / would have kept IFO in lock per instructions

Highlights from S3

Clips from the E-log

- 12/19 10:06 Day shift GRB Alarm with triple-coincidence lock! Believe it or not, we have all IFOs in lock when a GRB alarm occurs at about 18:00 UTC We will endeavor to stay in Science Mode for the next hour. Many thanks to the operators. (keitht)
- 12/22 16:32 GRB alarm at 21:31:17 UTC, for this alarm was hard to maintain SM on IFOs, seismic. Several Watchdog alarms and others due to quake. (gmoreno)
- 12/24 08:21 ...Fortuitously, a GRB trigger arrived in the middle of this interval, with an event date/time of 11:50:29 UTC. (pshawhan)
- 12/26 15:18 GRB keepalive dead -- I note that the GRB 1Hz keepalive has ceased blinking. Notified DBarker, RRakhola. (landry_m)
- 1/2 07:04 GRB really is back with us. (hugh)
- 1/7 07:56 GRB Event Alarm at 7:45am Local. Luckily H1 is safely in Science Mode. H2 is slowly making its way back... (8:52) Ifo has since been in SM for the last 30+ min, thus contributing a little bit of data during our recent GRB window. (corey)



The screenshot shows a terminal window titled 'HOGDS_GRB_DETAIL.adl' with the following content:

```

LHO HOGDS_GRB SUN DEC 14 16:45:00 2003 P D1
[DONE] [HELP]

Gamma Ray Burst Event [ ]

Event Date/Time 12 / 11 4 : 12 : 58 UTC
Stand-Down Date/Time 12 / 11 5 : 12 : 58 UTC

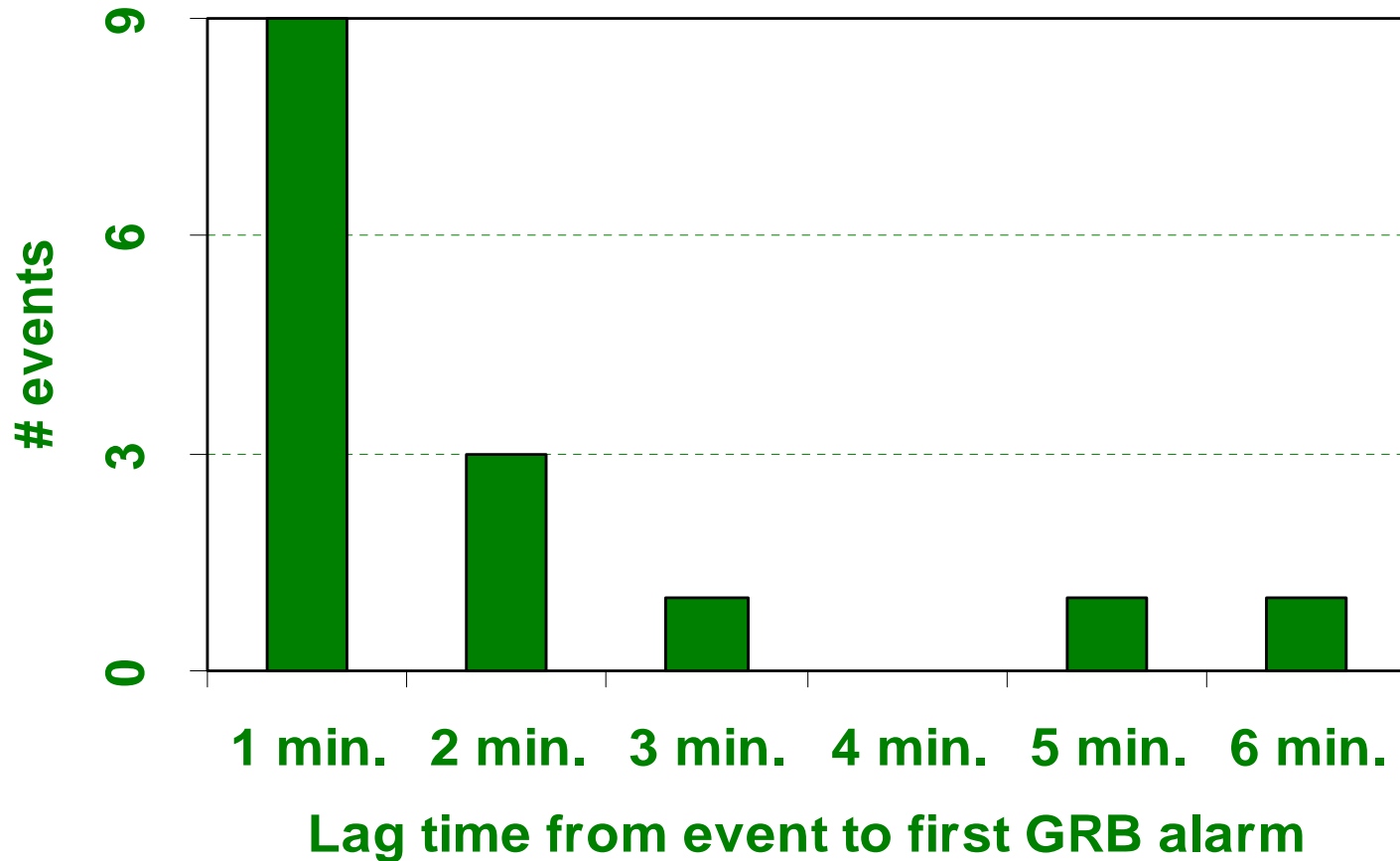
ALARM [ ] [ACK]

Server (red) Statistics

Server (red) Start Time 12 / 9 14 : 46 : 47 (LOCAL)
red Port ID 7070
red event counter 9

[ ] [LESS]
  
```

Delay between GRB and control room notification



What's Next?

- ❑ Get GRB alarms working at LLO, GEO
- ❑ Keep watch now that S3 is over!
 - Doing our part to avoid Stan's N.Y. Times nightmare
- ❑ Continue accumulating data for the Triggered Burst Search using “science mode” opportunities between science/engineering runs
 - Control room checklist
 - “Automatic” data archiving (sends email to Greg, Ben, and Igor)
 - IFO state is summarized in the e-log

