GLAST USERS' COMMITTEE (GUC)
Telecon Minutes
February 16, 2006

Present:
Committee members:
Josh Grindlay (chair), Roger Brissenden, Jim Buckley, Wim Hermsen, Don Kniffen, Jim Ling, Alan Marscher, Reshmi Mukherjee, Greg Stacy, Mark Strickman, and Ann Wehrle

Ex Officio committee members: David Band, Neil Gehrels, Rick Harnden, Julie McEnery, Chip Meegan, Peter Michelson, Jay Norris, Steve Ritz, and Rita Sambruna

Colleagues: Lynn Cominsky

The meeting began at 11:30 AM EST

Brief Introduction - Josh
There was a SWG telecon yesterday, and some issues discussed there will be repeated here. Otherwise, the main items for discussion in this GUC telecon are to keep the Committee informed of progress on the mission and to consider open Action Items. We shall also confirm the date for the next f2f meeting in May.

GLAST and planetarium show premier; other E/PO news – Lynn
The planetarium show on black holes, with opening credits for support from GLAST, opened in Denver; it will be distributed worldwide starting 4/1. The only GLAST representation at the opening was Lynn's E/PO team. The show has been sold out, and was written up in different papers. The PBS show will air 9/26; it uses some of the material in the planetarium show.
E/PO held an outreach session at the AAS meeting in January which was well attended. However, as we will discuss later in this Telecon, we need help (from the GUC!) in staffing the GLAST booth at future AAS meetings.

NASA budget and HQ issues - Rick
The GLAST budget was augmented in FY07 to deal with the Qwiknut problem (the release mechanism for the antenna and solar arrays) and to correct a funding profile issue. GLAST should not have any funding problems as long as the project stays on budget and schedule. The director of the Universe Division at NASA HQ (soon to be renamed the Astrophysics Division) has been changed; Anne Kinney is now detailed to GSFC. Her deputy, Rick Howard, is now the acting director. He is knowledgeable and very supportive of GLAST. The NASA transformation that started with Griffin's appointment is moving slowly, and therefore the appointment of a new division director may take time.
The Explorer program is in trouble (e.g., NuStar was cancelled). Griffin is trying to continue the various space science programs but the previous plans anticipated higher

budgets. Ann W. reports that at JPL Science programs are gutted while Exploration programs are getting money.
When Don attended the Astronomy and Astrophysics Advisory Committee (AAAC) he was told that NASA's FY07 budget was not increased because it was perceived by OMB that NASA's technology does not help the US's competitiveness as directly as components of NSF's and DOE's science does.
The GLAST GI program will not be affected under the current budget profile. Josh asked when the Fellows program will begin; Steve believes it will be in Cycle 1. Josh noted that HST and Chandra began earlier. We will come back to this issue at our next meeting.

LAT – Peter
The LAT is well into integration, and will be shipped to NRL in the spring. The schedule is uncertain because of problems with the flight processors (the EEPROMs on one RAD750 board were not properly bonded). Testing is ongoing; most of the LAT hardware is in place. The instrument is becoming one unit and will be kept as so. DC2 will start soon.

GBM – Chip
The longstanding EMI noise problem has been solved (the noise could have interfered with the GPS antenna). The EMI test on an engineering unit was run yesterday, and the noise is far below the requirement. The flight unit will now be upgraded. Delivery of the GBM to the spacecraft is scheduled for 6/5 (but might be a few days later). The power box has been sent back to Germany for small tweaks.

Mission – Steve
Preparations for the launch are advancing. The launcher's excess lift capacity will probably be used to lower the orbital inclination (to ~25.3deg) that will decrease the duration of the SAA passages and decrease the GBM's particle precipitation events. The Delta IIH is currently on 'hold'; resolution of this issue is anticipated soon.
The development of the ground system is moving along. Various ground system tests are being planned.
The spacecraft development has the usual small glitches. The spacecraft uses the same RAD750 processors that are causing the LAT problems.

DC2 – Julie
DC2 will use a simulation of 55 days of LAT survey data. The sky model is now complete, and includes variable sources, GRBs, pulsars, etc. Sources below the detection threshold are included. In addition, realistic numbers of the different source classes are included (e.g., ~1000 AGN, ~300 pulsars, etc.). The data set will include cosmic rays and albedo photons. The data are currently being FITSified.
The platforms supported in DC2 include Windows, Mac OS/X, and Red Hat Linux [?]. The kickoff meeting will be held 3/1-3 and will have ~100 attendees. The kickoff will describe the data and tools, and will include tutorials. Since the LAT science working groups are actively planning post-launch studies, they will present their plans to use the science tools to achieve their goals.
DC2 will help develop the user interface and tools for the GUC beta testing later this year.

DC2 is from the beginning of March to mid-May, and will end with a closeout meeting at GSFC. The closeout will probably be after the GUC f2f in May, and therefore only an interim report will be presented at the GUC meeting.
Jim Buckley asked about how systematic errors would be included. One of the DC2 goals is the determining the systematic uncertainty in positions, etc.
Jim Ling is interested in a list of tools and their relationship as well as when and how the GUC would see the results from the DC2 exercise.

Beta testing – David
In 9/06 a subcommittee of the GUC (see Minutes from Nov. '05 meeting) will beta test the proposal tools, which will be linked to the GSSC website. These tools include a source detectability calculator and a web-based version of XSPEC that can be used to simulate spectra.
In 11/06 the full GUC will beta test the SAE tools (including: Likelihood package; pulsar tools; and GRB tools). The GUC will then also comment on the Documentation then available to support the tools.
Josh raised the issue of whether the May GUC f2f (5/8-9) will be premature since DC2 will be in progress; LAT team members may be too busy with DC2, and an assessment of the tools based on DC2 will not be available. However, after reviewing the options and also considering (again) the "reserve" date of May 11, 12), the decision is to keep the meeting on 5/8-9.

Multi-wavelength discussions in progress - Steve
Steve and Harvey Tananbaum discussed joint Chandra and GLAST observations; we should have a coherent peer review of proposals for joint observations. Josh asked whether we can use the same model as for other mission pairs (e.g., Chandra and HST), and Steve answered that this is indeed the plan. Steve and Neil are developing plans to inform the burst followup community about GLAST; this community might not otherwise be knowledgeable about non-burst gamma-ray astronomy. Neil mentioned that there is a Swift follow-up team that should be pulled into GLAST. Consequently there will be a special workshop about GLAST at the Venice GRB meeting in early June. The Great Observatory meeting in May will now also include GLAST. We should make similar plans for other topical conferences (e.g., AGN meetings). Jim Buckley asked whether plans for other wavelength communities are being developed; Steve suggested that we discuss this at the May GUC meeting since the GUC should be more involved. The GUC multiwavelength subcommittee (Rene is chair; see Nov. '05 meeting Minutes) should start planning NOW, and should report at the May meeting. Alan Marscher asked about the connection between the GI program's support for multiwavelength observations and the plans the GUC is making. Steve replied that the mission is trying to interest observing groups and facilitate joint observation campaigns between GLAST and other missions.

Meetings – Neil
The booth at the AAS was under-staffed, particularly by scientists (Roger Blandford and Nick White commented on this). The booth needs to include information on the GI program, the availability of data, etc. Scientists should staff the booth, especially during breaks. The booth will be at the HEAD meeting in San Francisco (October 4-7, 2006) and the January, 2007, AAS meeting.

GLAST Symposium - Steve and Peter
The first GLAST Symposium will be held at Stanford but the exact choice of venue is the current concern. It will probably be at the Stanford Alumni center (parking may be problematic); it has many meeting rooms. The choice of date is fluid; we need to identify conflicts with other meetings and with NRAs in February, 2007. The second meeting (interval TBD, but probably 18 months) will be in Washington, and subsequent meetings elsewhere.

Thus far the agenda items for the May f2f (5/8-9/2006) meeting include: a DC2 update; a discussion of correlated multiwavelength plans (including Swift's follow up team); a tool demonstration during lunch the first day; and a science talk during lunch the second day. Additional agenda items should be sent to Josh.

The GUC was undecided whether another telecon should be held before the May f2f meeting, which is just under three months away. If new business arises that requires GUC comment or consideration, we shall definitely schedule a telecon.

The telecon ended at 12:53 PM EST.