AGENDA GLAST Science Working Group Phone Call #11 November 14, 2002 Place at GSFC: Building 26 Rm 212 Time: 11:00 AM – 1:00 PM East Coast Time J. Ormes Presiding

11:00	Welcome and Opening Comments Review of Agenda	J. Ormes
11:05	Comments from Headquarters Status	D. Kniffen
11:15	Comments from DoE Status and issues	K. Turner – on travel
11:25	Comments from Foreign Partners Status and issues	France, Italy, Germany
11:35	Project Status Status	L. Citrin
11:50	LAT team report, issues	P. Michelson
12:05	GBM team report, issues	C. Meegan
	Report on Science Support Center Multiwavelength	No Report/travel D. Thompson
12:30	Transient Policy Report	Band/Dermer/Grenier
12:40	EPO PR	L. Cominsky N. Gehrels
12:50	Face-to-face SWG meeting, Feb. 10-11, 2003	J. Ormes
12:55	Action item review	J. Ormes
1:00	Adjourn	

Updated: 11/13/02

GLAST SWG Telecon 11/14/2002

Attended:

Guido Barbiellini	Chip Meegan
Elliott Bloom	Peter Michelson
Patrizia Caraveo	Jonathan Ormes
Lynn Cominsky	Martin Pohl
Chuck Dermer	Steve Ritz
Brenda Dingus	David Thompson
Neil Gehrels	Stephen Thorsett
Neil Johnson	
Don Kniffen	Guests:
Giselher Lichti	Seth Digel
	John Deily

Roll call and welcome by Jonathan.

Don Kniffen – HQ

Has been back at HQ since November 1st. Email address is <<u>dkniffe1@hq.nasa.gov</u>> Has been working on the International Agreements. CNES agreement formally sent to CNES for signature.

Jonathan gave a talk "articulating data rights" at the SAWG meeting – none to 1 year, 90 days is a compromise. Jonathan voiced the need for the establishment of the Users Group now. The data rights issue could be reviewed by this group. Don stated the group should be established and a charter written. This will be an **ACTION** item for Don. Ormes, Ritz and Gehrels are meeting tomorrow, Friday, to think through Guest Investigators data rights. The data rights issue is the only thing standing in the way of the completed PDMP. (Note: data rights may not be presented in the PDMP.) Clarification: The rights in question are "idea rights" – 90 days for the general public. At the SAWG meeting, an issue of "intellectual property" was brought up. Can you, in fact, hold ideas proprietary? This issue needs to be taken to an attorney. Don to take this **ACTION** on.

Kathy Turner – was on travel so Peter Michelson reported for D.O.E., that the CD-2 has been approved.

Comments from Foreign Partners:

Italy: Ronaldo Bellazzini e-mailed in his report:

"Dear Colleagues,

Unfortunately I cannot attend, for family reasons, the SWG meeting of today. Therefore I send you a short note on the more recent news from Italy:

1)ASI side: GLAST formal approval and a three years funding request has been presented to ASI today. This request covers ASI support for both the LAT and Malindi and for the non-INFN scientific community. It is coordinated by Ronaldo Bellazzini from INFN. It has the strong backing of INFN,CNR and INAF(Italian National Institute for Astrophysics), the three Agencies for high energy astrophysics and particle physics. It will be defended in public next Thursday. If we go trough, signature of MoA should come soon afterwards. We are reasonably optimistic.

2)INFN side:

i) 50 E.M. and 350 flight ladders are in production;

ii) 26 trays for the E.M. are in production;

iii) formal order of 1800 SSD (800 with INFN money, 1000 with ASI money) is being prepared. It should go out before the end of the year;

iv) commitment of money for a further order of 1500 flight ladders (2/3 of the total) of for one-half of the flight trays is underway. We want to commit the money before the end of the fiscal (calendar) year 2002. Formal order will go out in spring after reviewing the first series now in production;

v) vibe test of the E.M. trays are planned for December;

vi) 5 "live" E.M. trays will be produced in December. Full test bed for live trays is being assembled. Ronaldo"

Patrizia stated that a proposal for all the GLAST work in Italy was submitted today, that is, everything of high energy nature. Patrizia and Ronaldo decided to submit only one GLAST proposal. They did not put priorities on items; all items are equally important. There will be a presentation to ASI next week. Patrizia has e-mailed Peter and Neil asking them to provide letters of support to ASI stating the contribution from the Italians for this mission. Letters can help. Neil has forwarded the request to headquarters but has had no response. Don stated that all these requests have to go through Mark Allen, who is the International Coordinator at HQ. He is not in favor of these letters because to him it leaves the impression that we are telling them how to spend their money. Jonathan suggested that in writing these letters, we should stick to facts and not emotions. Letters from the project should focus on Malindi; SLAC should focus on instrument. This is a collaboration and everyone is working together. Elliott can also write a letter. How about D.O.E.? Should ask Kathy. Project, i.e. Jonathan and Liz, will update their letter. These letters should be done <u>now</u>. It will be too late in a couple weeks. Guido has seen a letter from Iarocci; he is very positive on GLAST.

France: Isabelle had a conflict and was not able to attend.

Germany: Giselher reported that everything is going well. They are still waiting for some hardware, are hoping to complete phase B by the end of the year, and are preparing an interface control document. Prospects for the years 2004-2005 look good. In 2003 there will be a little money shortage.

John Deiley – Project (Liz was unable to attend):

- 1. They received the initial approval of the 20MHz bandwidth down link. They are now checking with Malindi's specs.
- 2. Project selected ground system strategy following Swift model for MOC at GSFC.
- 3. Systems Requirement Review at Spectrum Astro next week. This review is for Spectrum to convince the Project that they interpreted the specs correctly.

Peter Michelson – LAT

Dick Horn is the new systems engineer.

- 1. A Collaboration Meeting was held at GSFC last month. The turnout, and science discussions were good. Next meeting will be in Italy, late May-early June. AAS meeting May 26-29, 2003. Dates need to be resolved soon. Once the LAT Collaboration has been scheduled, then the SWG will decide whether to tack on a meeting.
- 2. Just finished the Quarterly review with the Project office. Now getting ready for the CDR.

ACTION item for Peter – Up-to-date definition of LAT capabilities. The solar flare people need to know. Steve and Peter need to talk.

Chip Meegan – GBM

- Are dealing with the interface issues concern with location & angles of detectors. The decision has been made for the separate partitions. How much is GMB and how much LAT? It seems to be a memory management issue - GBM and LAT will be sharing the buffer. ACTION: This should be resolved and presented at the February Face-to-face.
- 2. Report on the GRB working groups: real-time down link as burst occurs what science do we need to get down quickly? What is LAT intending to do with down link? What is the limit and cost on use of a down link? Working on policy of sharing down link with the GBM and LAT. <u>This will be an agenda item for February.</u>
- Co-ordination of bursts activity co-or burst papers. Leading authors SWG? Peter stated that there needs to be a coordination of how data is released. This is a SWG issue – how can this be implemented and be fair to the community. ACTION item for Peter and Chip to talk first.

SSC – no report

Dave Thompson – Multiwavelength

An e-mail was sent to the SWG from Dave:

"Several of us from GLAST attended a multiwavelength workshop at the Adler Planetarium this past weekend. This was largely focused on the ground-based gamma-ray instruments, but it has a direct tie to what we will be doing on GLAST. One request was for each mission to set up a multiwavelength coordination Web page, with some information about instruments, plans, contacts, etc. I volunteered to be the initial contact person for GLAST.

Since this is a GLAST effort, not just LAT, I want to make sure that whatever we do involves everyone. Can we add this to the agenda for the SWG coming up? As a starting point, I would like to propose that we set up a multiwavelength group within the SWG and that we plan to set up such a Web page under the GLAST Web site at Goddard. I think we all recognize the importance of multiwavelength observations for the GLAST science. Taking some small steps now might help optimize the work that will have to be done before launch to enable the observations that will give the biggest scientific return.

If you are interested, the talk I gave on GLAST can be found at <u>http://lheawww.gsfc.nasa.gov/users/djt/GLAST/GLAST_Chicago.ppt</u> Dave Thompson "

Dave would like to make this web site live. It would be on the GLAST project website at GSFC and J.D. Myers would take care of it.

http://glast.gsfc.nasa.gov/science/multi/

Lynn suggested adding a down link to GTN.

Stephen and Peter to contact Jim Ulvestad.

Stephen Thorsett suggested a contact from Radio pulsars group be added.

Dave also proposed a mailing list for multiwavelength gamma-rays. This listed would be posted as <u>gammamw@olegacy.gsfc.nasa.gov</u>. J.D. will also maintain this.

Was approved by the SWG.

Jonathan suggested that the brighter AGN's be posted in real time; and post light curves from EGRET. This would help with the transient release policy.

Steve Ritz suggested the Ops concept document be posted on the website and an e-mail sent to tell people where to find it.

Transient Policy – Chuck Dermer reported.

E-mail from Isabelle:

"Dear all,

My only concern about the blazar/non-blazar approach in the present transient policy is that it involves identifying the source before being able to apply a criterion. It implies some extra time needed to look for counterparts and some thinking and time to set the identification. It also implies sources (even bright ones) that would not be firmly identified, then what do we do with them?

My feeling reading the policy was that the dichotomy had been introduced because the sensitivity (therefore the variation levels we can be sensitive to) is different at low latitude (=> Gal. sources) and high latitude (=> mostly blazars). But a micro-blazar could flare at high latitude and be very important for the community to follow up. There is a good chance it would not be covered by the present policy.

It seems to me there are two categories of sources we want to tell the

community about (aside from GRBs):

1) a new transient = a new source, not detected before, that shows up all of a sudden at a bright enough level. In this case, one has to define the ratio f_detected/f_sensitivity_limit over a timespan dt (a day? a week?) that triggers the "transient" denomination and action. f sensitivity limit can be set to the GLAST flux sensitivity limit over dt in the source direction, or half of it, as we wish.

2) a flaring source = a previously detected source that flares brightly enough. One has to define the ratio f_new/f_before over a timespan dt (a day? a week?) that triggers the "transient" action.

With this strategy, one does not rely on identification or

mis-identification of a source and the varying sensitivity problem across

the sky is taken into account. But, I have not really thought it out and

there may be traps... Please think it over.

Cheers Isabelle"

Chuck's recap and report:

The GLAST policy requires that notice of and data from the transients be immediately made public. Certain transients are so bright that need to be followed up at other wavelengths.

GLAST will see EGRET catalogue. Reviewed the problem: 5 counts, 5 sigma action. Considered flux of source and observing time.

800 MeV – GLAST detects in scanning mode in 2.2 days.

Blazar flare, not burst. Jonathan asked how do we decide when new flare. The criteria: is: 1) sufficient bright source, and 2) sources flare at certain level that hasn't been detected before.

This will be an <u>agenda item</u> for the next face-to-face. RSTE has similar transient policy, posted transients.

Chuck to send e-mail of the details.

Seth Digel asked how to handle alerts – once it get to the ground, does anyone care. Brenda stated that we do care.

Use GTN? Should ask Scott Barthelmy about this.

On-board detection of transients will be processed by the instruments – this is not a Spectrum problem. Whatever is done with this will be transparent to Spectrum Astro.

Lynn Cominsky – EPO

The combined Swift/GLAST booth has been taken to several teachers meetings. The Master teachers have put on 5 workshops that have been attended by over 400 teachers. Lynn is ordering more flashlights using GLAST EPO funds.

AGN activities have been completed. Lesson plans will be completed in about a month. The magic cube has been placed on hold – a couple more images are needed.

Stanford/Sonoma issue – everything has been placed on hold, because the money has run out. Jonathan suggested that Lynn call Mark Seidleck here at GSFC.

Next Face-to-Face:

The next face-to-face will be held on February 10-11, 2003 at GSFC. This will be a "no-frills" get together. There will be no registration fee. Please send agenda items to Sandy. Lynn will not be able to attend but she will send Phil. This meeting will be business only.

The next face-to-face will have the topic "diffusive emission," and will be organized by Martin Pohl.

Adjourned.

ACTION Items – this telecon.

- 1. Don Kniffen Establishment of Users Group.
- 2. Don Kniffen "Intellectual property" issue. Can you hold ideas proprietary?
- 3. Peter Michelson Up-to-date definition of LAT capabilities.
- 4. Peter and Chip Separate partitions: how much is GBM, how much LAT?
- 5. Peter and Chip Bursts activity, co-ordination of burst papers; implementation and fairness to community.