GLAST E/PO Program Status

Science Working Group Meeting 2/11/03

Lynn Cominsky
Sonoma State University
E/PO Work Breakdown Structure

1) Management
2) Assessment and Evaluation (WestEd)
3) Web based Materials
   - Web Site – continuous upgrade
   - Space Mysteries (2004-2005)
4) Educator Training
   - Educator Ambassadors Program
   - Conference participation
5) Printed materials
   - TOPS Lesson Modules
   - Posters and Activities
6) SLAC Virtual Visitor Center (2004)
8) GLAST Telescope Network
Workshops and Meetings in 2002 (since last SWG)

- **10/8/02** EA Jason Smith presented a teacher training workshop in D.C. public schools for The Challenger Center's Journey through the Universe program, including a GLAST overview to about 90 teachers.

- **10/12/02** EA Jason Smith presented a brief overview of GLAST at the World Space Congress in Houston, TX to about 30 teachers.

- **10/14/02** EA Daryl Taylor presented GLAST material at the NJSTA Pre-Conference Workshop to ~50 teachers.

- **11/14/02** EA Teena Della was the keynote speaker at a Quantum Leaps Career Workshop put on by SCWIST (Society for Canadian Women in Science and Technology) at Capilano College in North Vancouver, BC.

- **11/16/02** EA Daryl Taylor presented GLAST materials in a Gloucester County (NJ) Science Teacher's Workshop to about 75 teachers.

- **11/24/02** - EA Teena Della spoke about GLAST at Alouette Elementary in Maple Ridge, BC to 3rd graders who built the model AGN and drew it from different perspectives.
Educator Training

• **Workshops and Meetings in 2003**
  • 1/14/03 - EA Jason Smith presented a GLAST Mission briefing and activity demo, for the Challenger Center of Greater Washington to 15-25 Virginia Middle school teachers
  • 2/14 & 2/21/03 - EA Teena Della will be giving a total of five teacher workshops entitled “NASA: Magic in the Classroom” at the Coquitlam Teacher Association and the Vancouver, BC teacher professional development days.
  • 2/24/03 - EA Jason Smith: Short GLAST Mission Overview and poster handout, for San Diego Journey Through the Universe Week
  • 2/13/03 – EA Daryl Taylor: 7th Annual Taylor Workshop at WHS, including GLAST material
  • 3/27/03 – Phil Plait and EA Daryl Taylor will do TOPS workshop at National Science Teachers Association
  • 4/11/03 – Lynn Cominsky and EA Mike Ford will do TOPS workshop at National Council for Teachers of Mathematics
Educator Training

• Workshops and Meetings in 2003 (submitted)
  • 4/03 – EA Tim Brennan will present “Where particle physics meets orbiting astronomy: NASA’s GLAST Program” at the AAPT-regional meeting in Williamstown, MA
  • 10/03 - EA Jason Smith will present The Gamma Ray Universe at the NSTA Eastern Regional in Louisville, Kentucky.
  • 10/03 –Lynn Cominsky and Sarah Silva will present AGN workshop at CSTA in Long Beach, CA
  • 11/03- EA Mike Ford will present Astronomy with GLAST, and the GLAST Telescope Network (GTN) at NSTA Mid-west Regional in Kansas City
  • 12/03 – Lynn Cominsky will present AGN activities at the NSTA Western Regional in Reno, NV

• Learning at a Distance web site for EAs now up!
  http://epo.sonoma.edu/eas_lad/
Exhibit Booth – 2003 events

• AAPT in Austin, TX (1/03)
• AAS in Seattle, WA (1/03)
• HEAD/AAS in Quebec (3/03)
• NCN-AAPT at SSU (04/03)
• AAS in Nashville (5/03)
• CSTA in Long Beach, CA (10/03)
Printed Materials and Curriculum Development

- **TOPS (Ron Marson)**
  - “Far Out Math!”: using slide rules to understand powers and logarithms – now available!

- **GLAST AGN Materials**
  - Educator’s guide – now complete, about to go through GPO approval cycle – will be printing 2000
  - 5000 more posters will be printed with activity on back
  - AGN image featured in SEU “Beyond Einstein” Roadmap and used in a GSFC press release, featured on NASA home page!
GLAST Telescope Network

• RTS-1 (SSU robotic telescope)
  – now being polar aligned at SSU Observatory
  – CCD and filter tests underway
  – Archiving system in draft release
  – Will be Internet accessible and taking AGN data by Spring 2003

• Proposal submitted to California Academy of Sciences to locate RTS-1 at Pepperwood

• Plait and Spear were able to control Mike Ford’s telescope in Kansas, over the Internet

• GTN-AAVSO poster presented at AAS in Seattle

• GTN web site redesigned – it is now “self-starting”

• GLAST scientists needed to partner with AAVSO, high school students and other participants
Other activities

• PBS special work just starting, subcontract now in place. NSF proposal is due 5/30/03
• WestEd not yet under contract for FY03, due to funding lag
• TOPS not yet under contract for FY03, due to funding lag
• UC Santa Cruz activities approved, in progress
• Next poster/activity set will feature supernova remnants, joint with XMM-Newton
• GLAST brochure design now underway
• Magic cube design to be joint with Spectrum-Astro
• Space Mysteries start will be delayed until 2004 due to concept revamp and (non-GLAST) funding lag
Summary

• E/PO program functioning smoothly
• Educator Ambassadors in high gear
• Products are being completed and widely distributed