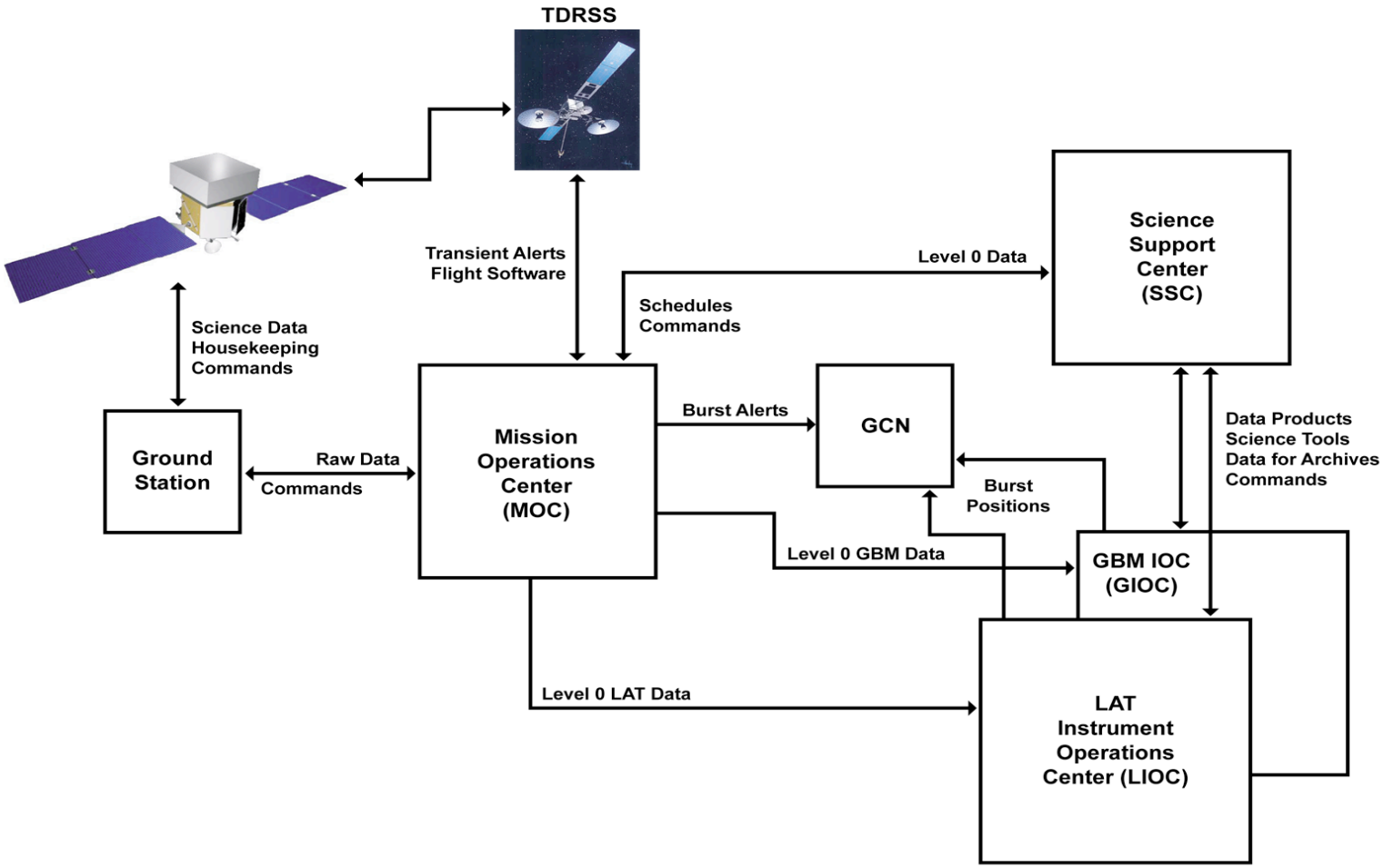
Status of the GLAST Science Support Center

David Band – Science Lead, SSC

Jay Norris – SSC Manager

SSC Within Ground System



Accomplishments--1

- **Roles and responsibilities defined at the SSC-IOC interface:**
  - SSC and IOCs are partners in defining suite of science tools, establishing standards, and evaluating completed tools
  - SSC scientists participate in developing tools
  - Prerogatives of instrument team members respected

  - SSC and IOCs collaborate on representation of instrument response functions
  - Instrument teams determine calibration procedures
  - Instrument teams implement response functions

  - SSC has a role in designing and testing Level 1 pipeline
  - SSC has a backup Level 1 pipeline for use in an emergency

Accomplishments--2

- Current Staffing – Manager, Science Lead, 2 scientists, scientific programmer, webmaster, administrative assistant
- Upcoming interviews with candidates for scientist positions
- CGRO SSC has hired programmers for CGRO FTOOLS. These FTOOLS may be applicable to GLAST data, and programmers may transfer to the GLAST SSC in ~a year.
- Documents
  - PMDP revised
  - SSC Functional Requirements Document revised
  - Report of GLAST Data Products Working Group (with 1st pass at ICDs)

SSC Staffing Plan

- Staff consists of scientists, programmers, support staff
  - Manager (J. Norris) — C.S. Oversight: Budget, Staffing
  - Science Lead (D. Band) — Scientific direction, Development of Science Tools
  - LAT I.S. (T. Kotani) — Liason with LAT team, LAT expert
  - GBM I.S. — Liason with GBM team, GBM expert
  - Calibrations Scientist — Calibrations Expert
  - Archive Scientist (D. Davis) — Design, Implementation of Archive
  - User Support Scientist — Guest Investigator Support
  - SW Lead (B. Schaefer) — Design of Analysis Tools, Pipelining
    + 5 Scientific Programmers
  - Webmaster (J.D. Myers) — Website
  - Admin. (S. Barnes) — Administrative Support

Master Plan--Mission

- FY2002– Staffing; Documents; Design science tools, database & pipeline
- FY2003– Develop science tools, database & pipeline
- FY2004 – Mission planning tools; Science tools; Database construction
- FY2005 – 1st NRA; Complete operations system: mission planning, databases; End-to-end tests of ground system
- FY2006 – Launch; Support checkout; Support Phase 1; 2nd NRA
- Subsequent FYs – Support Phase 2 (e.g., timeline, conferences); Support GI program; New NRAs
- Phaseout – Transfer databases, software to HEASARC

Plan--FY02

- Staffing:
  - Hire calibration, GBM scientists. Interviews next week, 2 next month.
- Documents
  - Finish & sign off on PDMP
  - Finish & sign off on SSC Functional Requirements Document
  - Contribute to other documents (e.g., Operations Plan)
- Databases
  - Study and model organization of the photon database, e.g., use HEALpix? Other schemes?
  - Bob Schaefer is taking over from Cathie Meetre
- Response functions
  - How to use CALDB in GLAST framework
- Level 1 Pipeline
  - Definition of end-to-end processes

Plan--FY02, Continued

- Level 2 Science Tools
  - Set up SSC-IOC software working groups
  - Develop list of tools for investigators
  - Establish requirements, deadlines, etc., for these tools
  - Develop standards based on HEASARC standards
    - FITS I/O
    - Platforms supported
    - Computer languages
    - User interfaces
    - Multimission approach
  - SSC scientists part of development groups, begin defining the analysis issues, developing algorithms