GLAST Large Area Telescope

WBS 4.1.D SAS
GSFC Monthly Review

Period Ending: July 2005

Richard Dubois
LAT SAS Subsystem Manager

July Accomplishments

- **Flight Integration Support**
  - Pipeline working smoothly
    - perl back-end work done waiting for good time to install: managing db connections better; allow easier connections between task datasets prior to CCB approval
    - Tested with DC2 MC in test pipeline
    - parallel process long data runs in test now
      - Have multiple batch jobs reconstruct a single digi (raw data) file
  - 32 TB unix disk for I&T, MC, DC2 etc support in place.
- **Infrastructure**
  - Windows code builds now fully automated – 3 dual processors for builds just added
  - Installer now supplies full loads for linux and windows
    - Friendly java gui ready (primarily for windows)
  - Setting up role-based authentication service to control access/privileges on our web applications. Will be prototype for other web apps
- **LAT DataServer**
  - Analyze pipeline-produced ntuples, applying user cuts; deliver via ftp.
  - Selection by (run, event) now available.
    - Want to connect this to eLog for querying I&T data
  - Testing concept of putting (ra, dec, energy, time) in relational db and querying that for astro analysis; 2nd query can apply cuts to full (merit) event data.
    - Ingested DC1 data for starters

More July

- **Switching focus to DC2 prep with I&T stable**
  - **Had very successful planning meeting at Goddard at the end of June**
    - **Crystalized schedule and work plan**
  - **New CalRecon first version released:**
    - **3 new energy correction algorithms added**
      - **Show improved overall resolution in concert**
    - **MIP-segment finder algorithm added**
    - **Improved algorithm to determine shower axis direction from CAL**
  - **Generated 2M allGamma, 10M backgrounds samples to test performance**
  - **Planning another iteration this week**
    - **Getting rapid turnaround on algorithm improvements**

Upcoming for August

- **I&T deliverables**
  - **Deal with ACD??**

- **Continued focus on DC2**
  - **Continue testing and iterating on new CalRecon**
  - **Current schedule has us generating large dataset for background rejection analysis (~1 billion events – 300 CPUs for a couple of weeks at SLAC and Lyon)**
  - **See schedule slide**

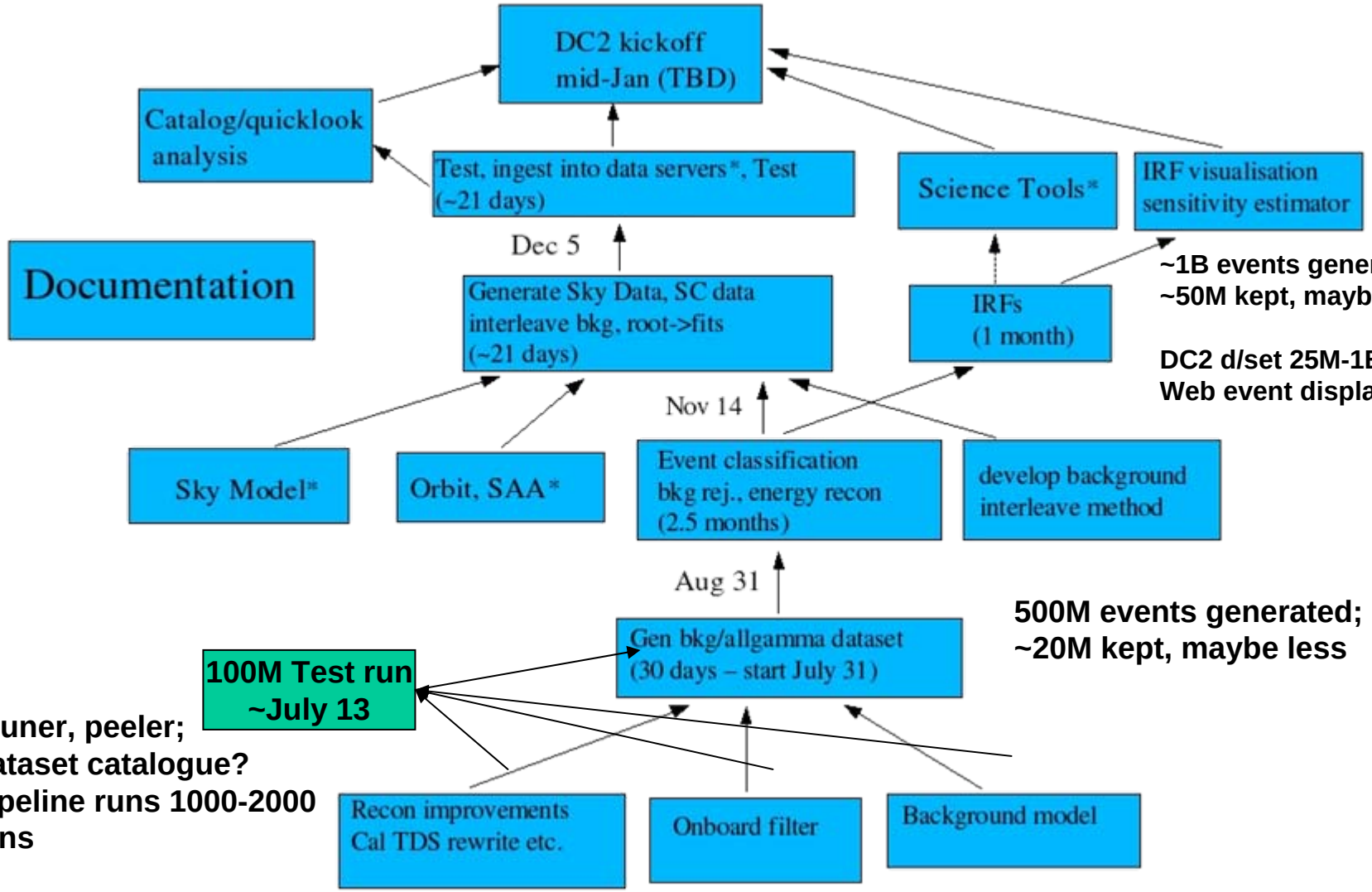
DC2 Status

DC2 Coordinating Committee:

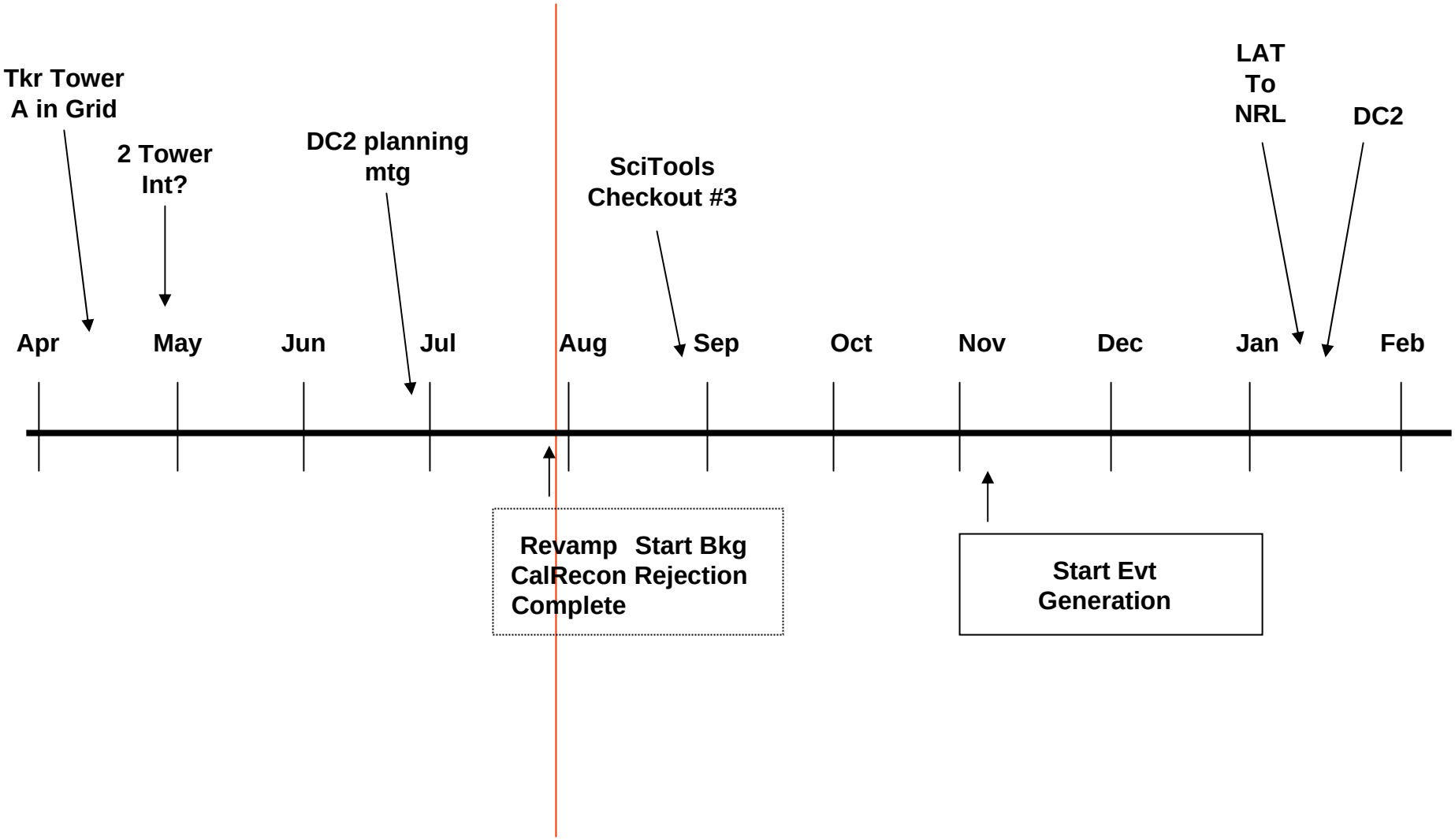
- **Toby Burnett**
- **Rob Cameron**
- **Valerie Connaughton (GBM)**
- **Seth Digel**
- **Richard Dubois**
- **Francesco Longo**
- **Julie McEnery (chair)**
- **Steve Ritz**
- **Tracy Usher**

http://confluence.slac.stanford.edu/display/DC2/Home
http://www-glast.slac.stanford.edu/software/DataChallenges/DC2/JuneWorkshop/coverpage.htm

High Level DC2 Schedule



Timeline


Tkr Tower A in Grid
2 Tower Int?
DC2 planning mtg
SciTools Checkout #3
LAT To NRL
DC2
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Revamp CalRecon Complete
Start Bkg Rejection
Start Evt Generation