



Science Support Center

# **FSSC Data & Software Status**

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# FSSC Data Status

### LAT Data Server

- Currently Serving P7V6 data
- Average of 43 queries/day
- Preparing to serve pass 7a, fully reprocessed data
- Additional LAT data
  - LAT LLE data products available via BROWSE
  - A smaller (less memory intensive) LAT diffuse model
- ► GBM
  - Preparing for the transition to full time GBM TTE mode



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## Science Tools Status

Science Tools Release for Spring 2012

- Based on LAT Team ST v9r27p1
- gttsmap tool will create TS maps for binned data
- Improved integration for gtdiffrsp
- bug-fixes for energy dispersion integration in likelihood
- gtbkg now computes rates (not counts) and fills the stat\_err column
- The exposure calculations now use DSS keyword info on the CONVERSION\_TYPE selection by gtselect to determine whether front, back (or both) should be used
- Updated GtApp to make gtexpcube2 callable from gt\_apps.py
- Includes support for the new bitmask classification
- The P7\_MC (Monte Carlo) IRF's are incorporated



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## Science Tools Status

- Updated / New products available
  - The spacecraft file now includes the position of the Sun for filtering
  - The data quality flag in the P7 V6 data has been enhanced to include information on short duration events e.g. solar flares
  - The earth limb template for the 2<sup>nd</sup> Fermi source catalog is now available for use
- Software will continue support for
  - gcc 4.+ compilers (e.g. Ubuntu 10,11+, Fedora 15,16, SL 5 & 6)
  - MAC OSX 10.6 (SnowLeopard), (OSX 10.7) Lion
  - Testing for Mountain Lion will start soon



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# Future Work

- Preparations for pass 7 data (full reprocessing)
  - Standard test scripts
  - Testing by science staff
- Science Tools updates (next release)
  - Inclusion of HEALPix support in gtbin
  - Better memory management in gtsrcmaps
  - Added Solar system tools
    - gtexpcubesun
    - gtltcubesun
    - gtexphpsun
  - Updated Earth magnetic field model to IGRF-11