D1/D2 Code Review

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System Architecture

- Web/FTP Interface
- Queue Manager
  - D1 Stager
  - D2 Stager
- D1 Server
- D2 Server
- Ingest

Message traffic
System Components

- **Web interface** — User interface to enter queries and retrieve results

- **Queue Manager** — Handles scheduling of queries and passes messages between the other components

- **Database Server** — Main Database search engine which performs the actual searches

- **Database Stager** — Prepares the data for delivery to user and places data on the FTP site

- **Database Ingest** — Prepares level 1 data for ingest into the database and initiates ingest process
System Specifications

- Database is designed to consist of several different components running on separate computers
- Each component operates independent of the others
- Communication through TCP/IP sockets
- Messages passed between components for communications - http://glast.gsfc.nasa.gov/ssc/dev/db_utils/messages.html
U1/U3 Web Interface

- The web page for the D1/D2 database access is now online at
  http://glast.gsfc.nasa.gov/cgi-bin/ssc/U1/D1WebQuery.cgi
Prototype Web Interface

GLAST Event

Which database do you want to query?

Database: Photon archive, D1, D2, Both

Do you want to search around a position?

Coordinates (RA, Dec) or (RA, Dec + radius)

Area Cut (RA/Dec + radius)

For the circle, enter in the radius in degrees.
For a Rectangle, enter in the length, width, and rotation, comma separated in degrees.
For an ellipse, enter in the semi-major axis, semi-minor axis, and rotation, comma separated in degrees.
Rotation is defined astronomically. Zero degrees is north, positive angles are to the east.

Time cut (MJD or Gregorian)

...and/or search by time?

Time: MJD
For Gregorian dates, please enter in the format DD-MMM-YYYY HH:MM:SS, with the start and (optional) end time separated by commas.

Enter the start and (optional) end MJD in the format MMMMM:MM:SS, with the start and (optional) end values.

If you would like to search from the beginning of the mission, put "START" instead of a start value.
If you would like to search up until the most recent point, put "END" instead of an end value.
If you do not enter anything, it will return results from the past 6 months.

...and/or search by energy?

Energy: GeV

Energy cut (MeV)

Enter the minimum and (optional) maximum energy, separated by a comma.

Click to Submit
Your query was successful!

GLAST Event Data
ftp://legacy.gsfc.nasa.gov/glast/U1WEB1015128183161558223133_D1_results.fits

GLAST Spacecraft Data
ftp://legacy.gsfc.nasa.gov/glast/U1WEB1015128183161558223133_D2_results.fits

These file(s) will remain on the public FTP server for approximately 30 days. Please retrieve them as soon as possible. For future reference, your query ID is **U1WEB1015128183161558223133**

Thank you!
-The GLAST SSC Team

Glast SSC D1 Web Interface