Fermi Science Support Center
Online Services

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FSSC Archive and Data Operations Manager

AAS 237, January 13, 2021
Overview

• The FSSC provide a number of online services for Fermi users and proposers.
• These are available at the FSSC website: 
  fermi.gsfc.nasa.gov/ssc
• These services include:
  – Data archive
  – Data analysis tools
  – Documentation on using the tools including tutorials
  – User support services
  – Proposer information
Fermi Data Archive

- List of currently available data products: [https://fermi.gsfc.nasa.gov/ssc/data/access/](https://fermi.gsfc.nasa.gov/ssc/data/access/)
- Fermi LAT Data Server
  - Query for LAT data by position, time, energy range
- HEASARC Browse
  - LAT Weekly files
  - GBM Daily, Trigger, and Burst data
  - Catalogs
- Some products can be directly accessed on the FTP Site
  - Weekly photon and spacecraft files
  - Mission long spacecraft file
  - GBM Data
- Separate pages for catalogs like 4FGL with data products like region files
Data Analysis

- List of available analysis software at FSSC: [https://fermi.gsfc.nasa.gov/ssc/data/analysis](https://fermi.gsfc.nasa.gov/ssc/data/analysis)
- Fermitools
  - Distributed via the conda package manager. Code is on Github.
  - Available for Linux and MacOS.
  - Installation instructions on website (really on Github wiki).
- **GBM Data Tools**
  - Allow general users to incorporate GBM analysis into their scripts and workflows
- User contributed software
  - Not supported by FSSC but we maintain a list.
- Documentation
  - Descriptions of analysis environment and techniques
  - Analysis Threads with step-by-step descriptions of some standard analyses.
Obtaining Help

- **FSSC Helpdesk**
  - Email fermihelp@milkyway.gsfc.nasa.gov
  - General queries, analysis help, etc.
  - ~4500 queries since the start of the mission.
- **Github issue tracker**
  - Useful for Fermitools specific questions
  - Public
  - Easier to track
  - Currently 62 open issues and 125 closed.
Mailing Lists

- Fermi maintains several mailing lists. These mailing lists are moderated, and your subscription must be approved by the list moderator.
  - fermi-papers - Updates on Fermi related papers; subscribe at https://lists.nasa.gov/mailman/listinfo/fermi-papers.
  - gammamw - Information on multiwavelength observations relevant to Fermi; subscribe at https://lists.nasa.gov/mailman/listinfo/gammamw.
- After you fill out the relevant subscription form you will receive an e-mail requesting verification of your subscription request, and then approval of your subscription by the moderator.
Other Services

• Mission Timeline
  – Tells you what Fermi was doing any any given time
  – https://fermi.gsfc.nasa.gov/ssc/observations/timeline/posting/
• Fermi Bibliography Search
  – https://fermi.gsfc.nasa.gov/cgi-bin/bibliography_fermi
• Fermi Trigger Information (GCN)
  – https://gcn.gsfc.nasa.gov/fermi_grbs.html
• HEASARC xTime – convert from, e.g., MET to dates
  – https://heasarc.gsfc.nasa.gov/cgi-bin/Tools/xTime/xTime.pl
Additional Slides

• The following slides are not part of the main presentation but provide additional material.
Fermi Observations for MW 658

Mission week 658 starts with a continuation of the modified sine rocking profile from the previous week, which has a 5715 second repeat period. On day of year 007 (2021-01-07) at 00:20 there is a 10 minute threem observation during which an updated modified sine rocking profile with a 5713 second repeat period is used. Then, on DOY 011 (2021-01-11) at 12:26 there is a second threem observation during which a 50/50 degree rocking profile is loaded. This profile continues until the end of the week. Note that positive rock angles are south, and negative angles are north.

Latest News

- Fermi Sky Blog
- Fermi Blog

Nov 4, 2020

NASA Missions Help Pinpoint the Source of a Unique X-ray, Radio Burst

On April 28, a supermagnetized stellar remnant known as a magnetar blasted out a simultaneous mix of X-ray and radio signals never observed before. The flare-up included the first fast radio burst (FRB) ever seen from within our Milky Way galaxy and shows that magnetars can produce these mysterious and powerful radio blasts previously only seen in other galaxies.

Sep 18, 2020

Fermi LAT Resumes Normal Operations

The LAT instrument has resumed collection of science data following an outage on September 17 to recover from a reboot of one of the onboard processors. The LAT was not collecting science data for 11 hours between 9:28 UTC and 20:28 UTC.

Aug 25, 2020

NASA Missions Explore a "6E Fighter" Active Flare

Quicklinks

- Fermi Homepage
- LAT Analysis Start Page
- Multiviewpoint Observation Reporting Form
- Fermi User's Group (FUG)
- Fermi Guest Investigator Program
- Post-Anomaly Observing Strategy
- Fermi TOO request
- LAT Monitored Sources
- LAT Instrument Performance
- Gamma Instrument Performance
- Public Fermi Website
- Fermi at the AAS
- Fermi Newsletters
- General Fermi Questions
<table>
<thead>
<tr>
<th>Repository</th>
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<th>Stars</th>
<th>Forks</th>
<th>Updated</th>
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## Azure Pipeline Runs

### Pipelines

#### Recent Runs

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<tr>
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<tr>
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### Anaconda Cloud

**fermi / packages / fermitools**

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</table>

1. **fermi-lat/Fermitools-conda** AttributeError: 'module' object has no attribute 'new_table'
   - #42 opened 24 days ago by Sanjuphysics12
   - updated 15 hours ago

2. **fermi-lat/Fermitools-conda** Have tools put version in CREATOR keyword
   - enhancement
   - #28 opened on Mar 7 by dorhorner
   - updated 15 days ago

3. **fermi-lat/Fermitools-conda** Python3 roadmap?
   - #44 opened 21 days ago by paulray
   - updated 16 days ago

4. **fermi-lat/Likelihood** gtsrcmap: Problem on the creation of the source maps with the new spectral functions in the 4FGL
   - #46 opened 22 days ago by principle
   - updated 18 days ago

5. **fermi-lat/Fermitools-conda** fermitools behaviour sensitive to the linux version
   - #43 opened 22 days ago by landius
   - updated 22 days ago

6. **fermi-lat/Fermitools-conda** Caught St13runtime_error at the top level: RoiCuts::sortCuts:
   - #40 opened 27 days ago by Sanjuphysics12
   - updated 24 days ago

7. **fermi-lat/Fermitools-conda** gttcube execution failed during light curve generation
   - #39 opened on Aug 27 by Sanjuphysics12
   - updated 29 days ago
### Fermi Timeline Posting

**MW 658**
Mission week 658 starts with a continuation of the modified sine rocking profile from the previous week, which has a 57.16 second repeat period. On day of year 007 (2021-01-07) at 00:20 there is a 10 minute freeze observation during which an updated modified sine rocking profile with a 57.13 second repeat period is loaded. Then, on DAY 011 (2021-01-11) at 12:24 there is a second freeze observation during which a 50.45 degree rocking profile is loaded. This profile continues until the end of the week. Note that positive rock angles are south, and negative angles are north. (updated: 31-Dec-2020)

**MW 659**
Mission week 659 starts with a continuation of the -580+80 degree rocking profile from the previous week. On day of year 014 (2021-01-14) at 06:50UT there is a 10 minute freeze observation during which a symmetric +/- 50 degree rocking profile is loaded. This profile continues until the end of the week. Note that positive rock angles are south, and negative angles are north. (updated: 23-Dec-2020)

**MW 660**
Mission week 660 starts with a continuation of the symmetric +/- 50 deg. rocking profile from the previous week. On day of year 21 (2021-01-21) at 02:12 there is a 10 minute freeze observation during which an updated symmetric profile is loaded. This profile continues until the end of the week. Note that positive rock angles are south, and negative angles are north. (updated: 30-Dec-2020)

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This utility allows you to view Fermi's observing timeline. It defaults to the current AO cycle, but you can also view past AO cycles, along with timelines showing a summary of the Targets of Opportunity (TOO), Automatic Re-pointing Requests (ARR), other pointed observations, and non-science periods. Explanations of the columns can be found in the glossary.

Pointed observations (like TeOs and ARRs) that interrupted the schedule are indicated in bold. Preliminary scheduled observations are indicated in italics.

**Note:** Updates to this page can be delayed by unexpected timeline changes. For information about ongoing Target-of-Opportunity observations, check the Approved TOOes page.

**Note:** If you have JavaScript enabled on your browser, you may click on column names to sort by that column.

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<th>#</th>
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<th>Start Time (UTC)</th>
<th>Stop Time (UTC)</th>
<th>Duration (sec)</th>
<th>RA (J2000)</th>
<th>Dec (J2000)</th>
<th>Mode</th>
<th>Type</th>
<th>Target</th>
<th>PI</th>
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<td>254 6803</td>
<td>-55 20575</td>
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<td>Survey</td>
<td>50 deg profile week MW650 - Part 2</td>
<td>Fermi</td>
<td>50deg, orbit period 5713 sec; +/- 50deg rock angle over 2 orbits</td>
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<td>660</td>
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