

Level 0 Simulation

Goal: Demonstrate ability to generate GEANT MC data, then prepare and process as though this was real data from the MOC.

- Basic machinery established by Heather, Bryson, Toby, et al before holidays
- Recent work has centered on adapting these processing steps to the GLAST pipeline system
- Level 0 simulation steps:
 - Gleam simulation, output digi.root and exposure (pointing) .ldf
 - Gleam generation of event data in ebf format
 - Repeat first two steps, as necessary
 - Concatenation of (many) exposure and event file collections
 - Gleam2CCSDS script, converting .ldf + .ebf -> MOC-like files
 - Feed into Bryson's Level 0.5 pipeline, then into standard Level 1
- Basic pipeline structure for this task is functional – have produced 1 full orbit minute of partial background data.
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- Remaining work
 - Convert from Pipeline 1 to Pipeline 2
 - (develop tools for Pipeline 2)
 - Automate file concatenation step
 - Add full complement of background sources and full sky model
 - Run off a full 90 (1 orbit) or 180 (downlink) orbit minutes of data