

G349.7+0.2 spectral analysis

26 July 2011

The following analysis of G349.7+0.2 (Two year Fermi catalog name: 2FGL J1718.1-3725) was done using pointlike with a 15 degree ROI and a Power law fit. The energy range used in the analysis is 100MeV to 100GeV, although the SEDs are shown only in the range of 1-100GeV since there is no reliable measure of their flux at lower energies.

Analysis directory: /afs/slac/g/glast/users/ariel/G349702

Model, catalog, and IRF directory: /u/st/ariel/cassa2FGL

The galactic diffuse model used: ring_2year_P76_v0.fits

The isotropic spectra models used: isotrop_2year_P76_source_v0.txt (For front and back events), isotrop_2year_P76_source_v0_front.txt (For front only events), isotrop_2year_P76_source_v0_back.txt (For back only events)

Catalog used: gll_psc_v04.fit

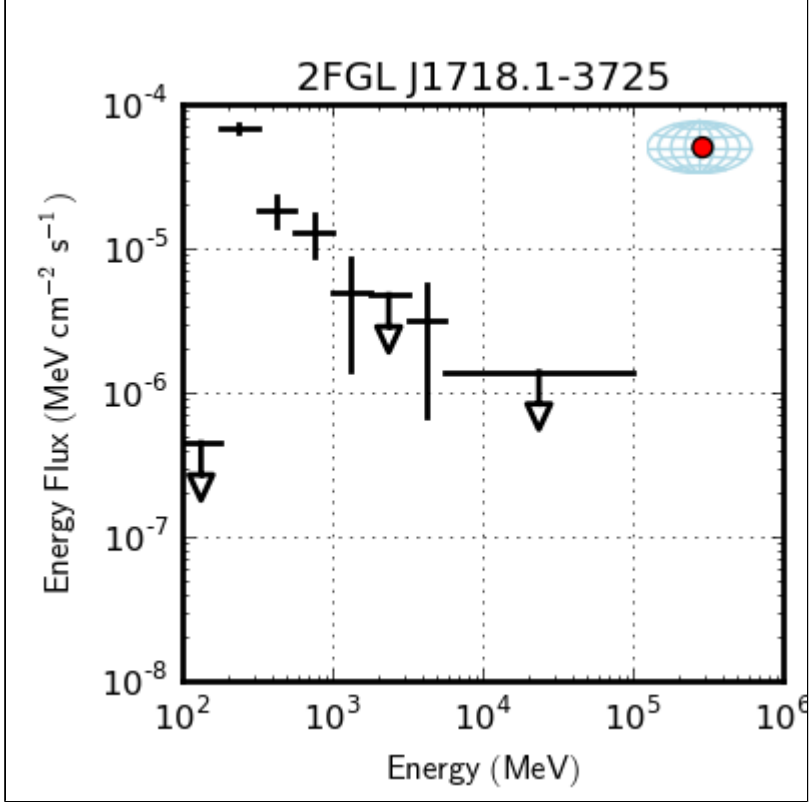
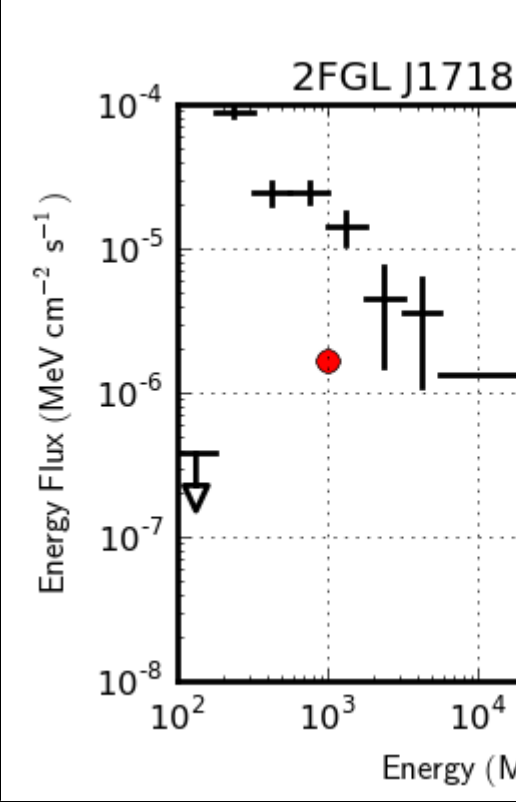
Instrument response function: P7SOURCE_V6

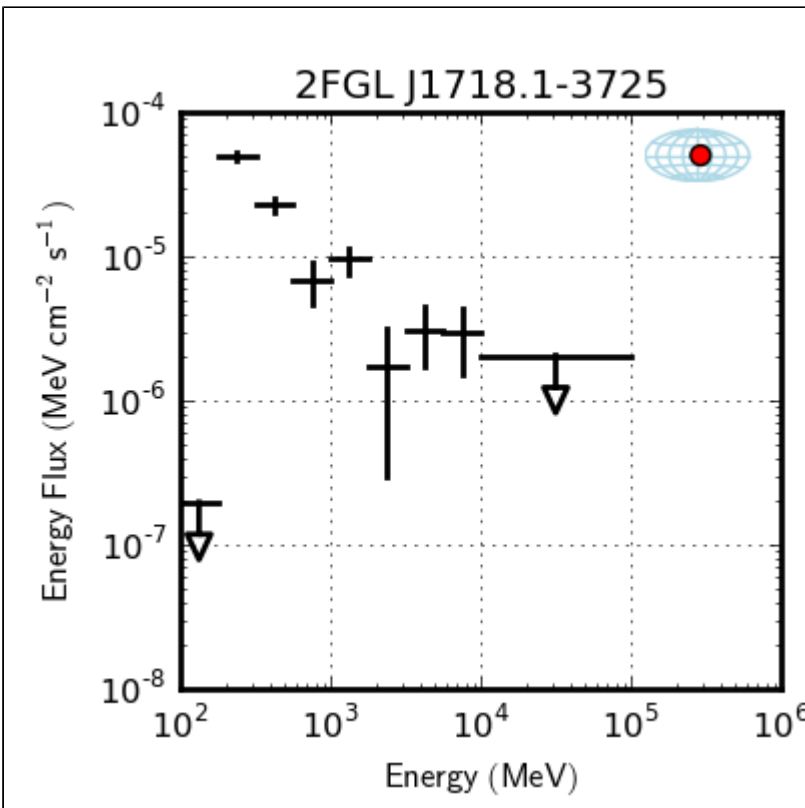
Full time window

MET

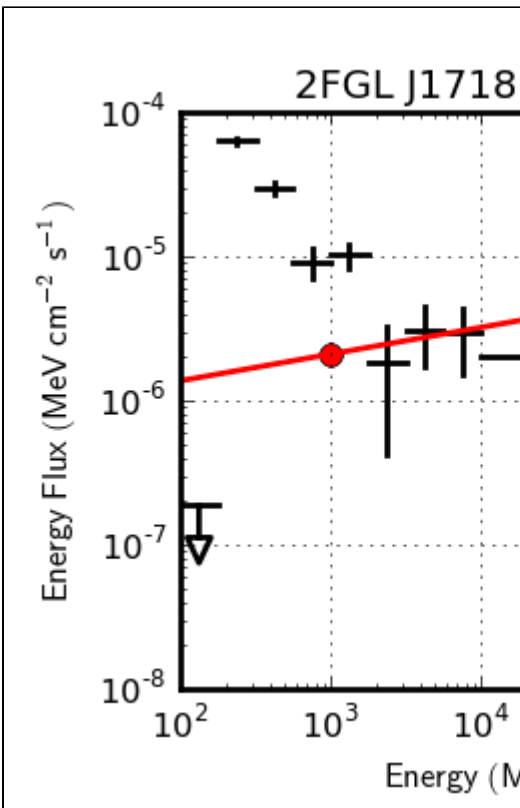
Start = 239557417 seconds (2008-08-04T15:43:37)

Stop = 328855431 seconds (2011-06-04T04:43:49)

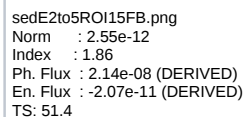
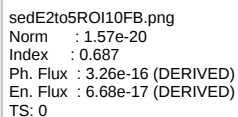
S E D s	ROI 10 degrees diameter	ROI 15 degrees diameter
B a c k e v e n t s	 2FGL J1718.1-3725 sedE2to5ROI10B.png Norm : 3.81e-32 Index : 0.179 Ph. Flux : 7.63e-27 (DERIVED) En. Flux : 2.76e-27 (DERIVED) TS: 0	 2FGL J1718 sedE2to5ROI15B.png Norm : 1.67e-12 Index : 1.82 Ph. Flux : 1.34e-08 (DERIVED) En. Flux : -9.56e-12 (DERIVED) TS: 7.1



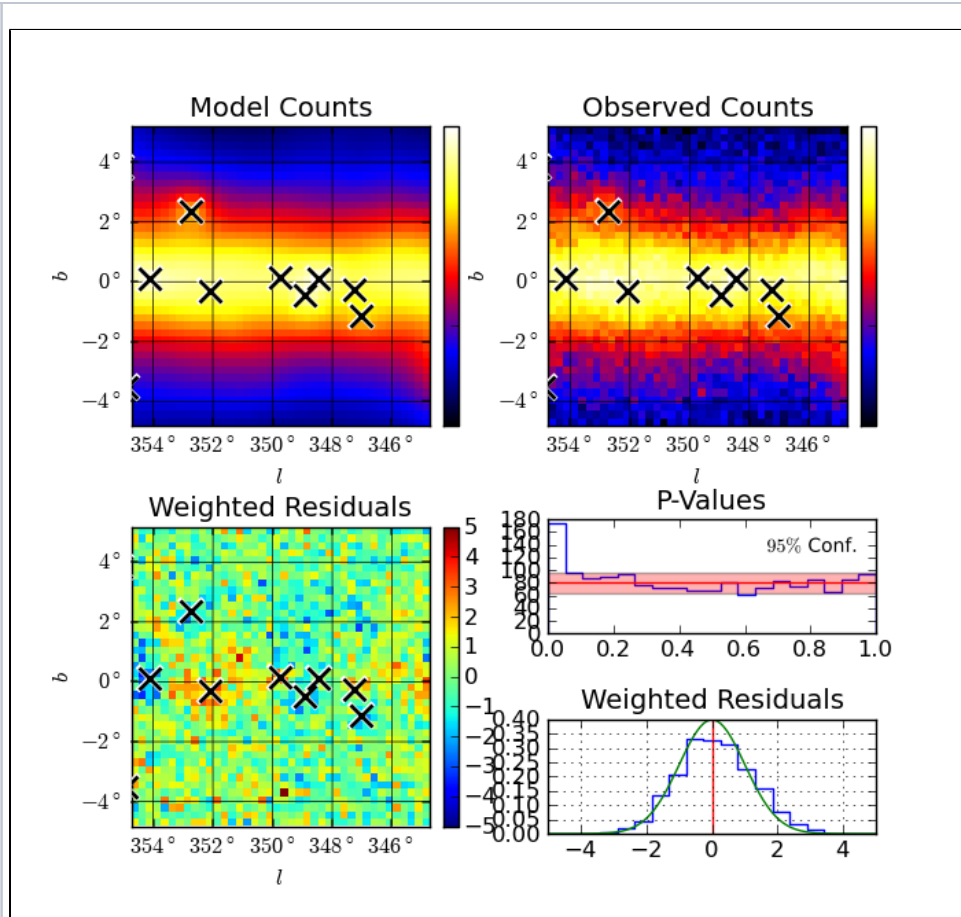
sedE2to5ROI10F.png
Norm : 7.4e-26
Index : 6.87
Ph. Flux : 9.27e-18 (DERIVED)
En. Flux : 1.79e-21 (DERIVED)
TS: 0



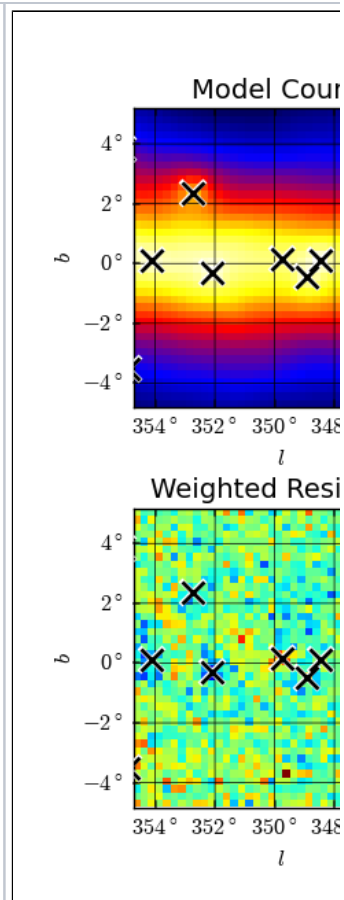
sedE2to5ROI15F.png
Norm : 2.1e-12
Index : 1.81
Ph. Flux : 1.68e-08 (DERIVED)
En. Flux : 1.18e-11 (DERIVED)
TS: 31.4



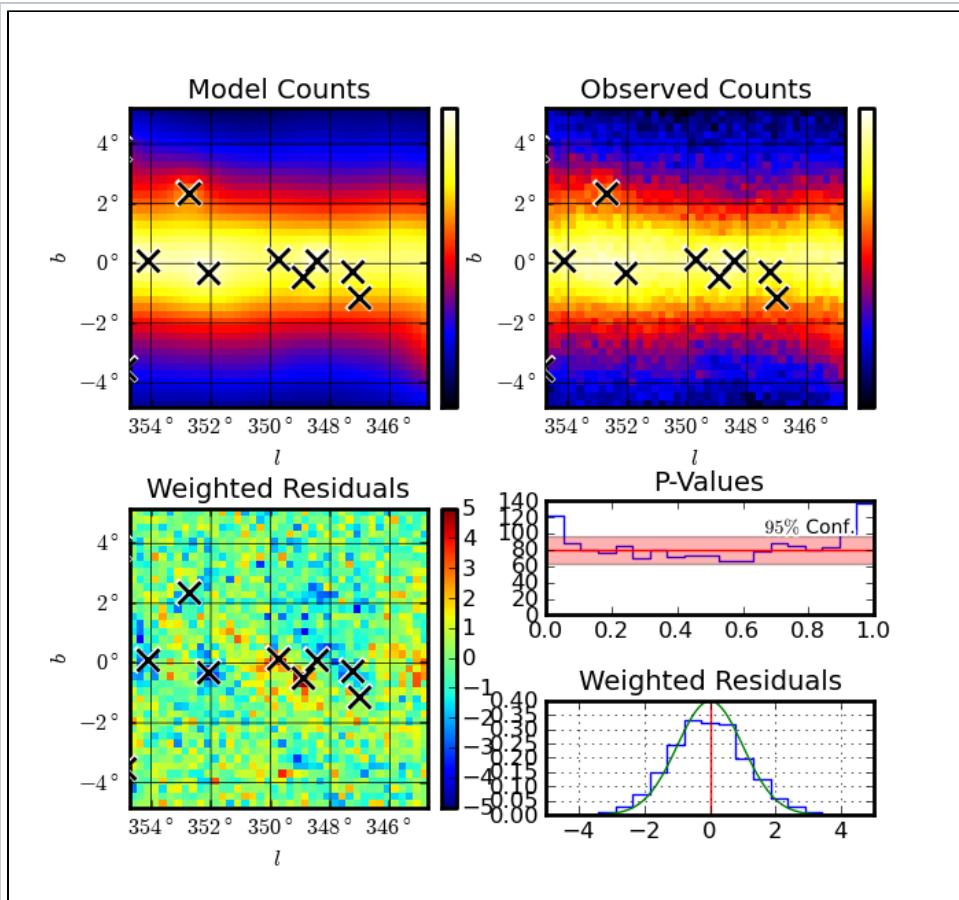
Counts Maps	ROI 15 degrees diameter	ROI 20 degrees diameter
Backevents		



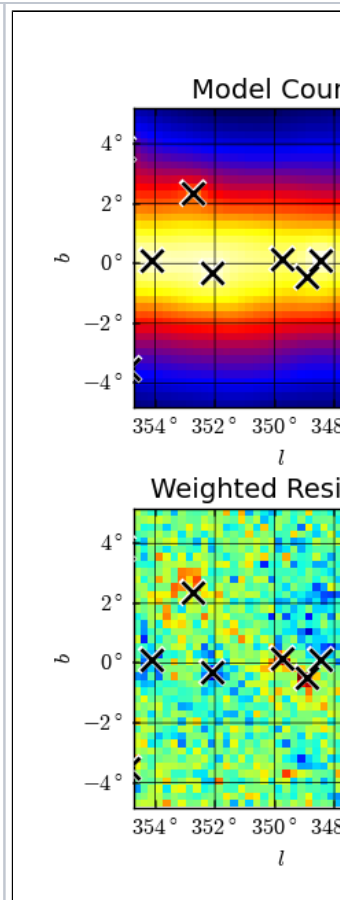
countsE2to5ROI15F.png



countsE2to5ROI20F.png



countsE2to5ROI15FB.png

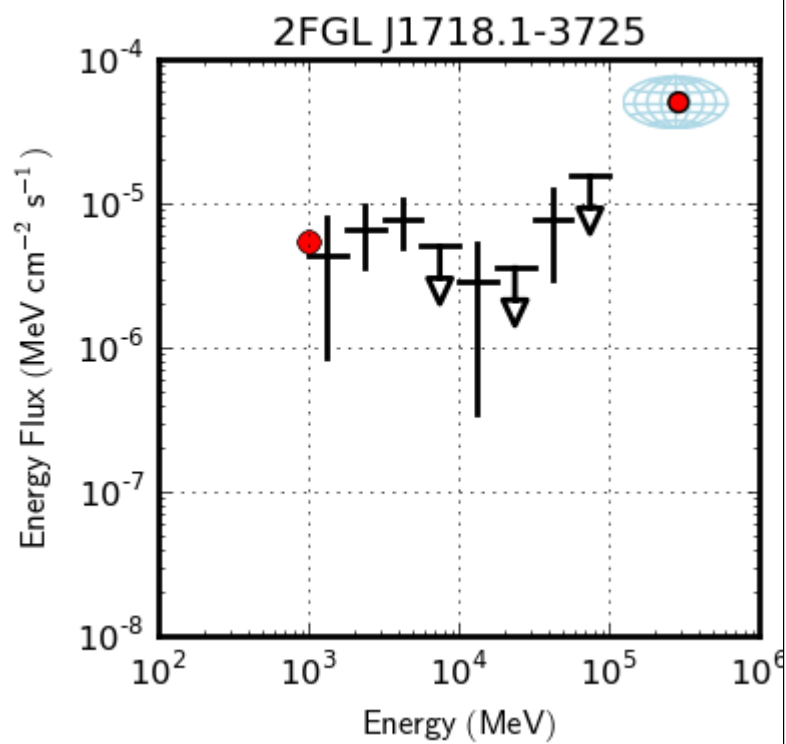


countsE2to5ROI20FB.png

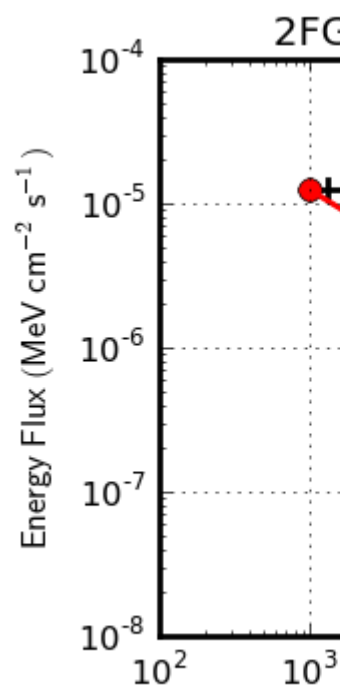
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Another attempt at fitting a power law for a new energy band of 1-100GeV for an ROI of 15 degrees width:

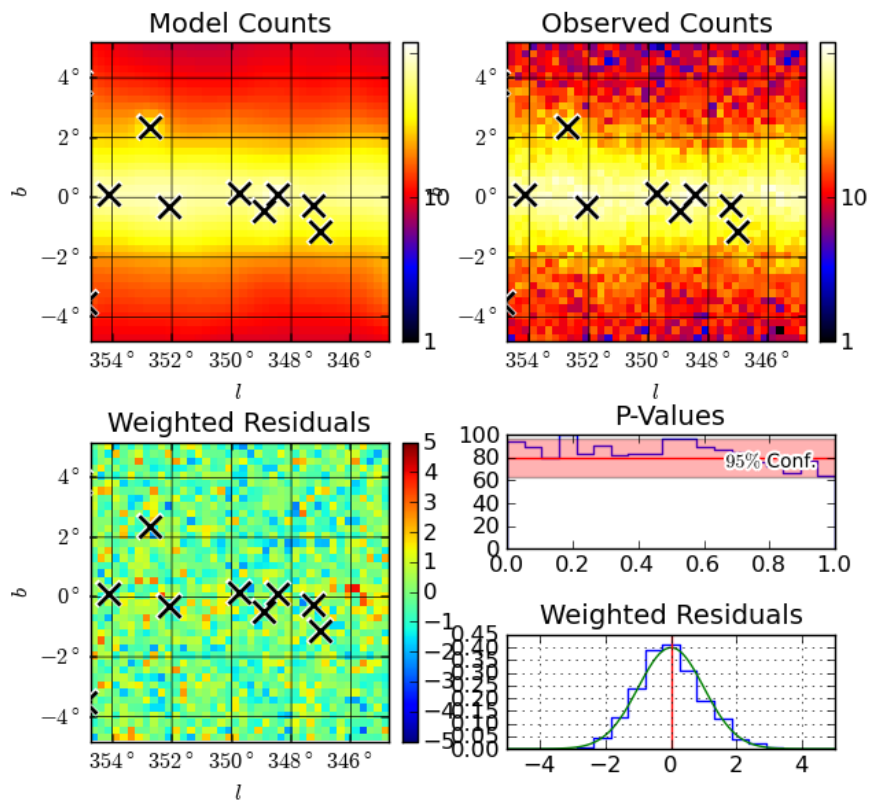
Full time window MET Start = 23957417 seconds (2008-04-15:4:33:37) Stop = 32855431 seconds (2010-06-04:4:43:49)	Back only events	Front only events
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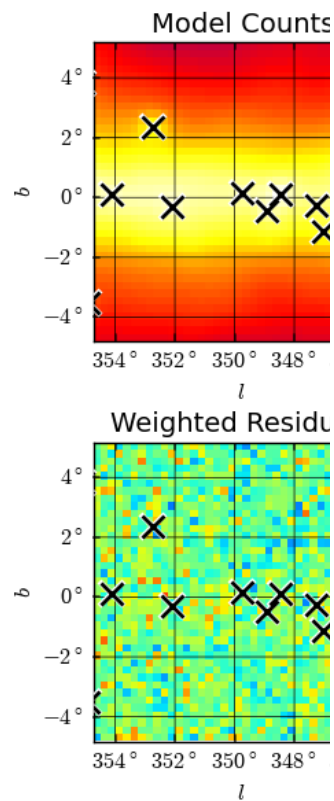
sedE3to5ROI15B.png
Norm: 5.42×10^{-12}
Index: 2.14
Ph. Flux: 6.55×10^{-8}
En. Flux: 8.64×10^{-11}
TS: 20.7



sedE3to5ROI15F.png
Norm: 1.25×10^{-11}
Index: 2.64
Ph. Flux: 3.32×10^{-7}
En. Flux: 1.36×10^{-10}
TS: 100.4



countsE3to5ROI15B.png



countsE3to5ROI15F.png