Satellite triggered bursts

26 bursts from BATSE, IPN, RXTE and HETE from Jan 2000, Jan 2002
  -- ~55 tube multiplicity trigger.

10 have substantial error regions (dr>1 degree)

re-reconstruct with version 53 of the offline.

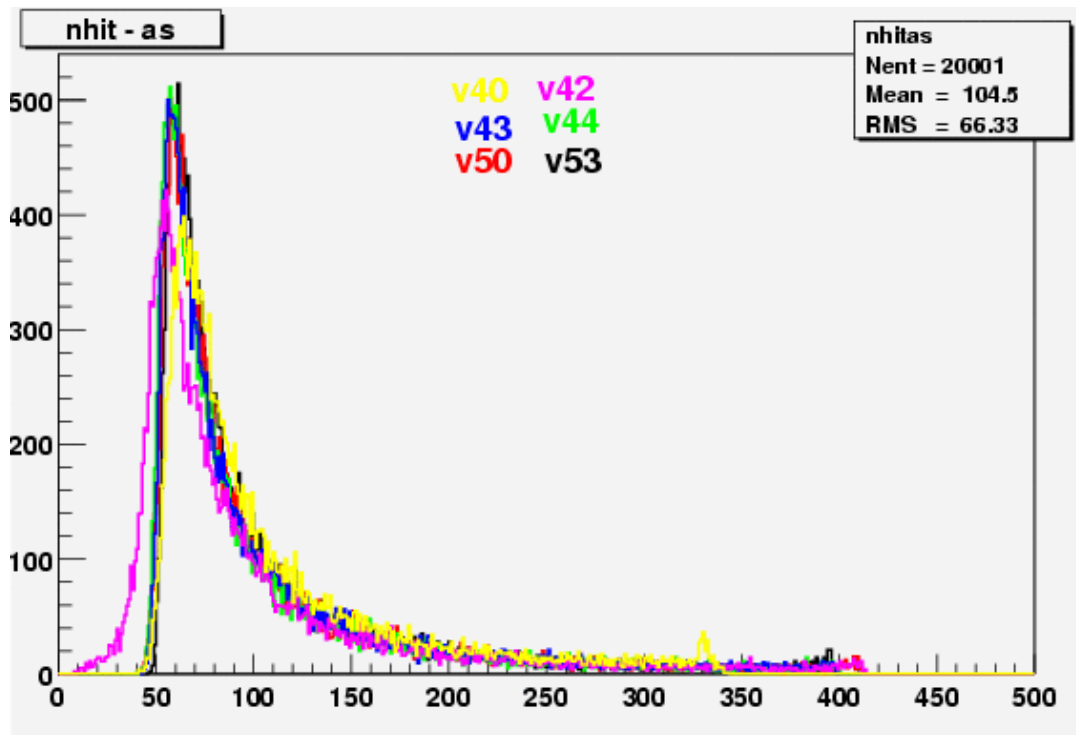no X2 cut, 1.6 degree radius circular bin, nfit>20

Binned grid search (same as for the 'grito burst).
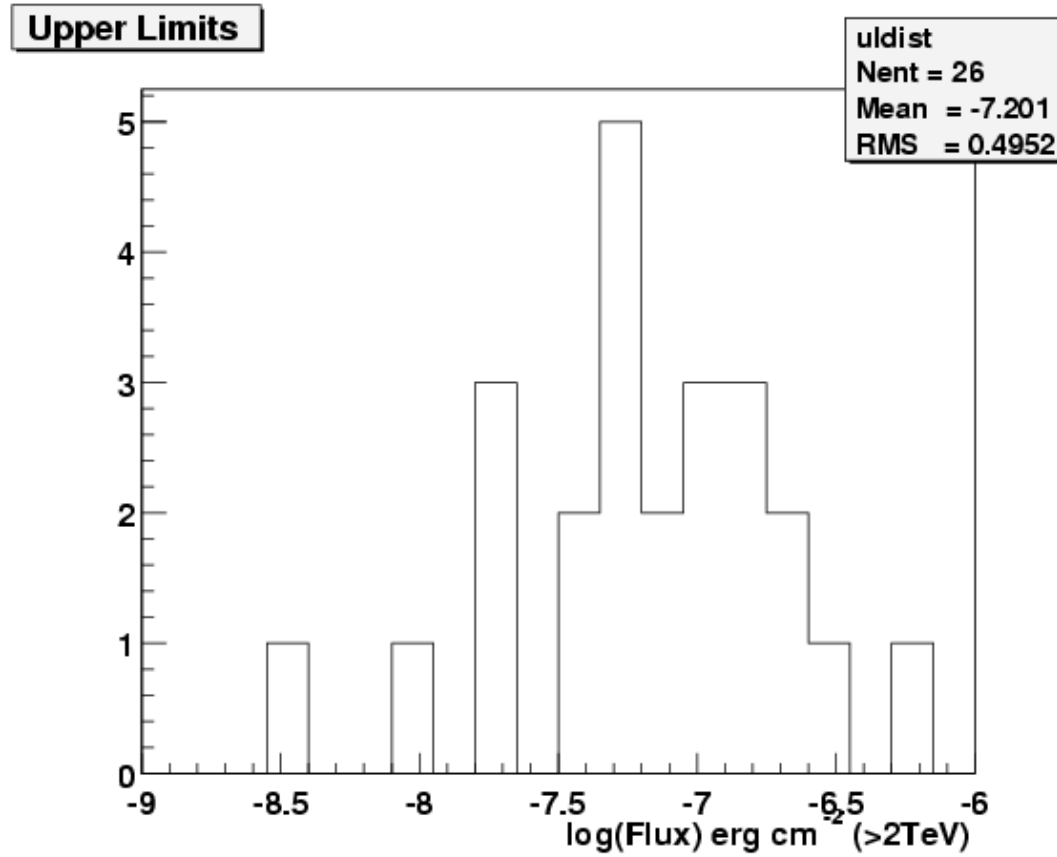
Calculate upper limit (in cnts) for each burst.

Simulations

The detector response for each burst was individually obtained.

Turn off tubes for trigger and calibration. Use correct reconstruction code.

Results
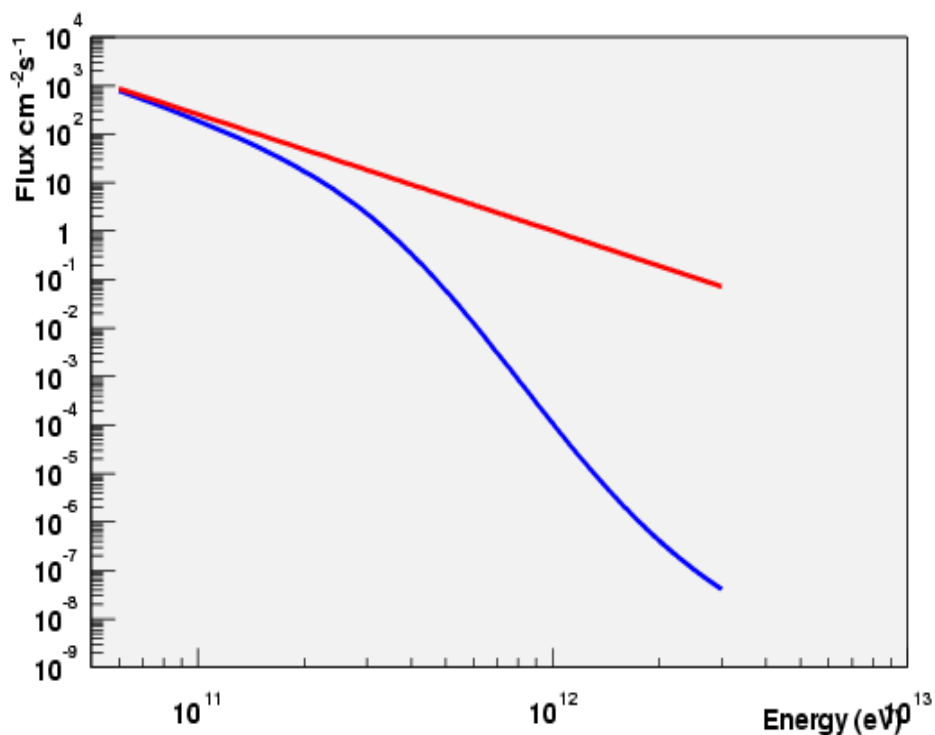

Published in proc. Of the Woods Hole workshop.

GRB010921: Low Energy Stuff

Z=0.45

Duration (Fregate) = 23.3 (now changed to 24.6s)

Zenith angle = 10 degrees

Use analytical approx of opacity vs energy at z=0.45 from Bullock (1998)

E-2.4 spectrum modified to account for absorption on the IR background.

Convolve this spectrum with A(E), integrate and compare with upper limit (13.62 cnts) to get the normalization
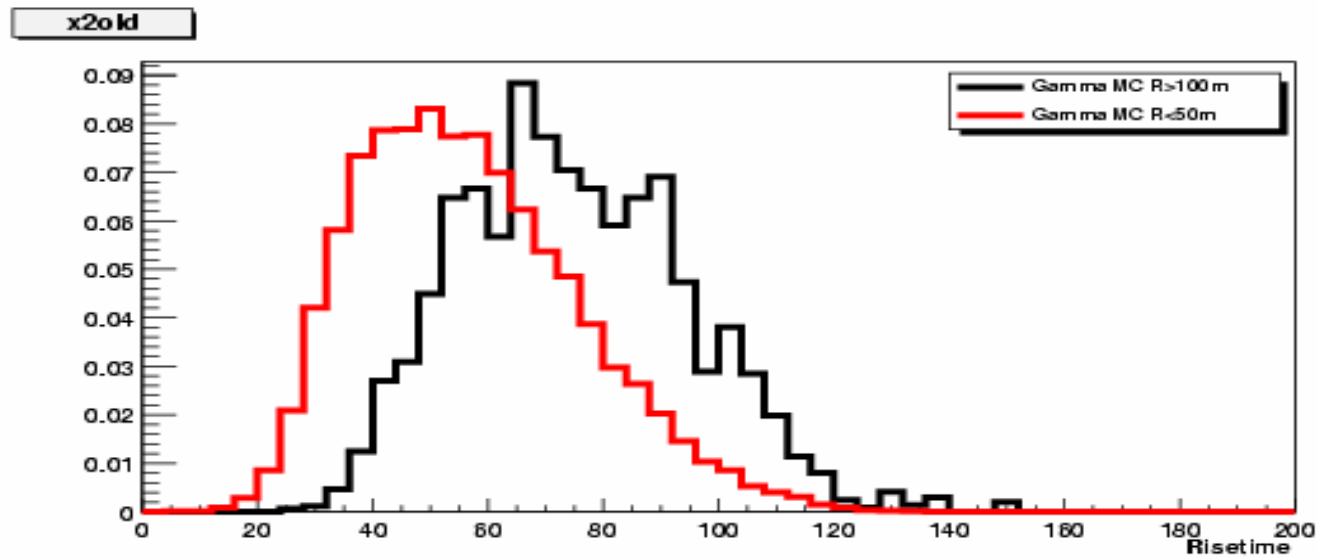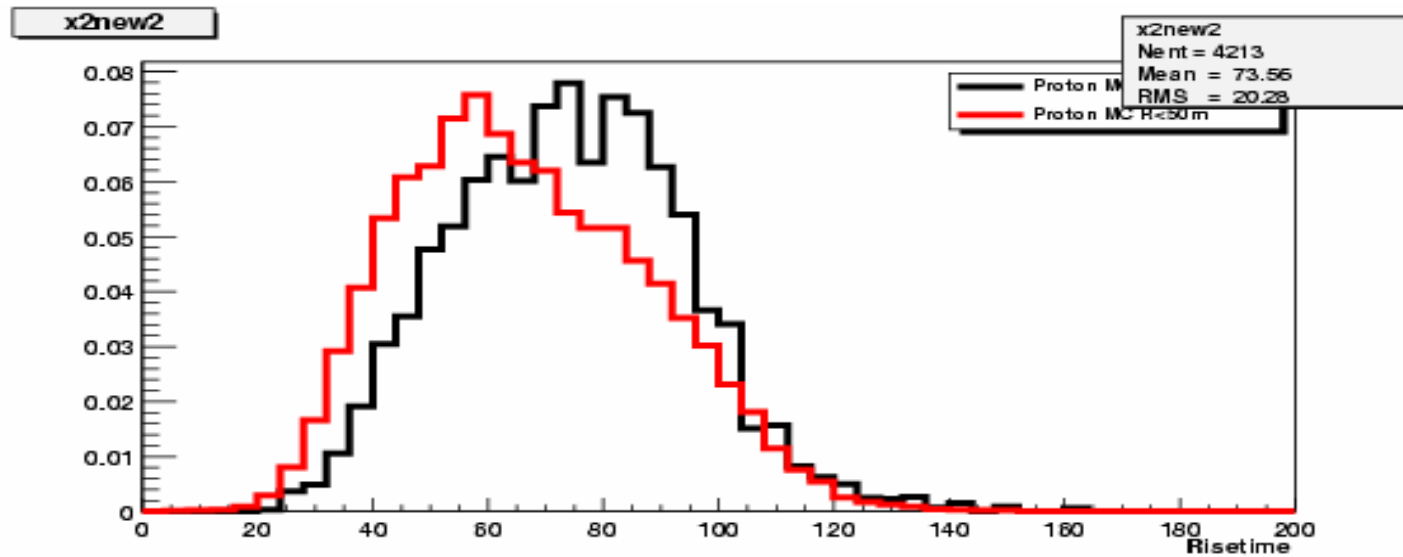
What should we do?

All 26 bursts or just GRB 010921?
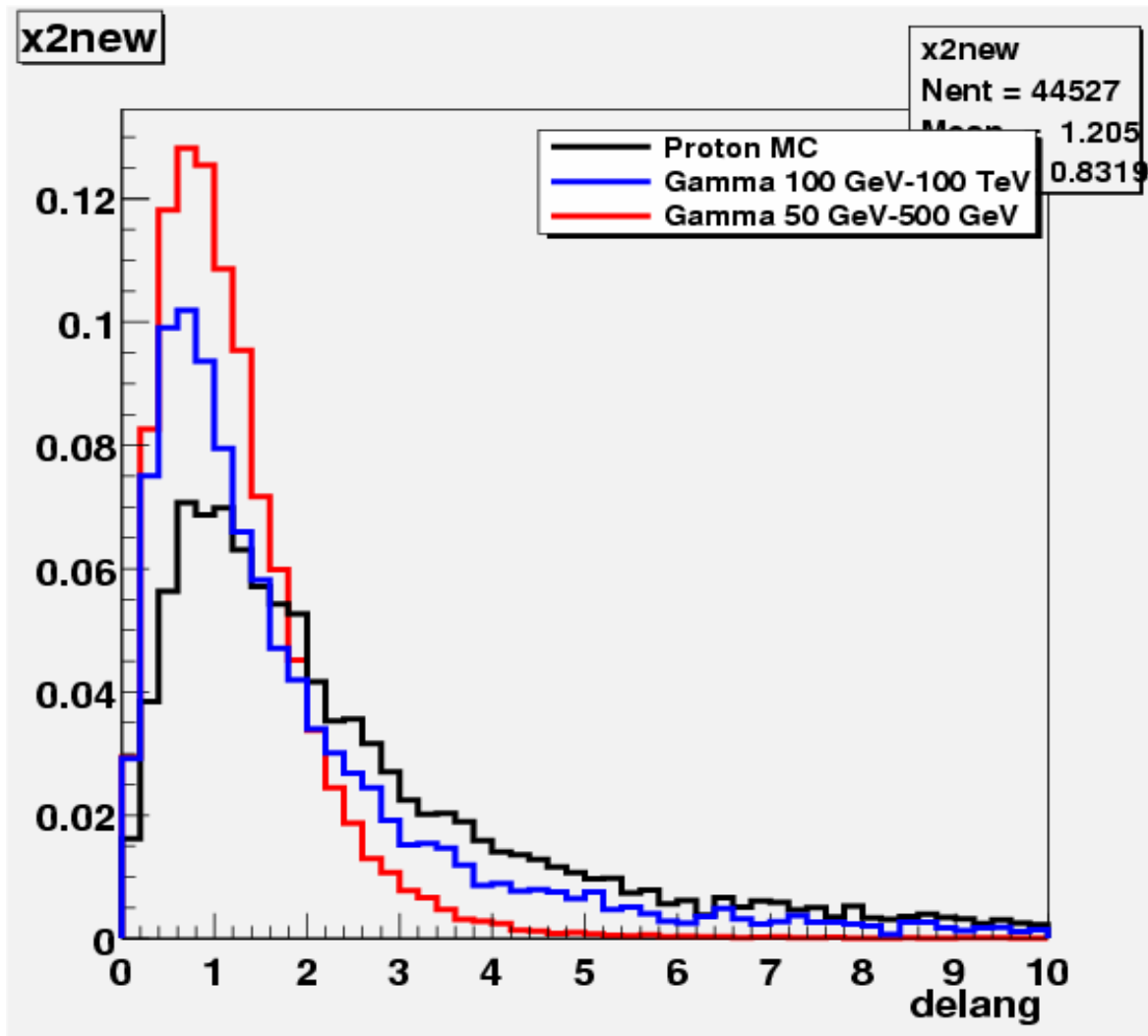
Develop low energy cuts/analysis for 55 tube trigger?

Not much progress since last meeting (bad)

Hopefully will have a draft out by the end of the year.

Core distance and risetime

Angular resolution

Reoptimize binsize?