GRB021211

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1 GRB021211

This burst was detected by all 3 instruments on board HETE earlier this morning. An optical transient has probably been identified for this burst. So there is a reasonable possibility that someone will be able to make spectoscopic observations and find the redshift of this burst.

Having already worried about whether we understand the new trigger well enough in the monte carlo to produce limits for the last 3 bursts we are in a position to produce a much more timely GCN circular with our limit for this burst.

This burst was at a zenith angle of 35 degrees, the duration reported by by hete was >5.7 s in the 25-400 keV energy band. I have used a duration of 6 seconds in the analysis.

```
no x2 cut, duration 6 seconds, nfit>20, 1.6 degree radius circular bin
signal: 11
background: 6
99.9% upper limit: 19.7
$A_{eff}$ = 185.1 m$^2$
J(>2 TeV) = 1.8 * 10^-6 erg/cm^2 (over 6 seconds)
J(0.2-20 TeV) = 3.8 * 10^-6 erg/cm^2 (over 6 seconds)
```

2 GCN Circular

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SUBJECT: GRB 021211 Milagro GeV/TeV Observations

Milagro searched for emission at GeV/TeV energies from GRB 021211
during the burst duration reported by the HETE WXM.  No
evidence for prompt GeV/TeV emission was found. A preliminary analysis
(assuming a differential photon spectral index of -2.4) gives an upper
limit on the fluence at the 99.9% confidence level of:

J(0.2-20 TeV) < 3.8 * 10^(-6) erg cm^(-2) (over 6 seconds)
```

3 Some plots for Frank

The following are the sky map (not background subtracted), the background map and the sky map with the background subtracted for 9 degrees around the burst location. The z axis is number of events within a 1.6 degree radius around the location.

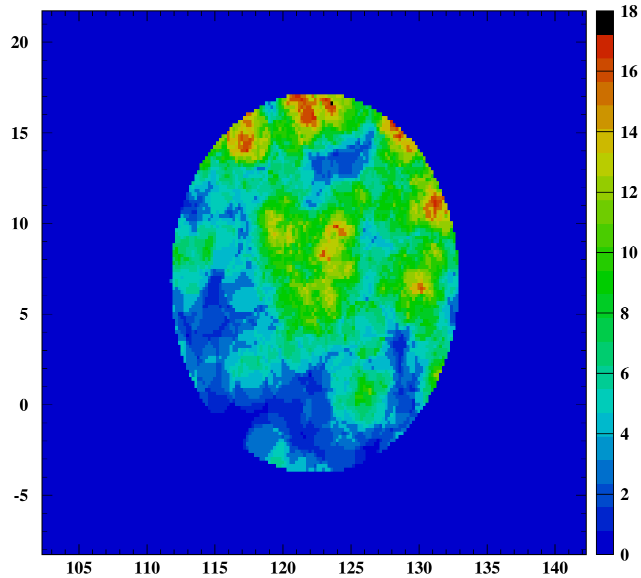

Figure 1: Sky map for 9 degrees around GRB021211

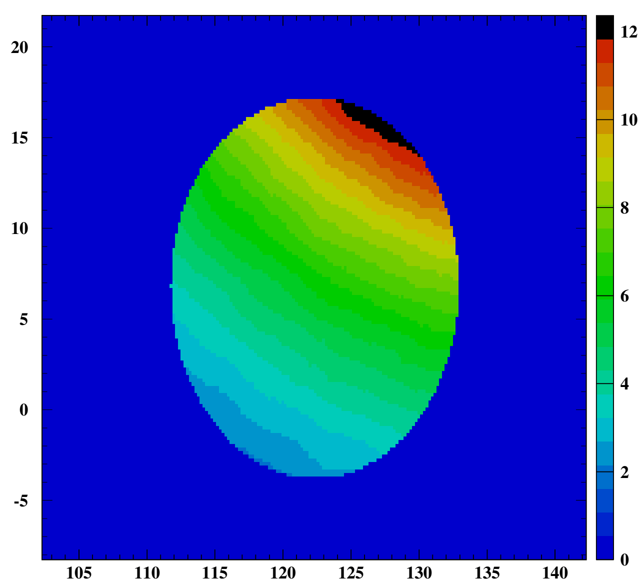

Figure 2: Background map for 9 degrees around GRB021211

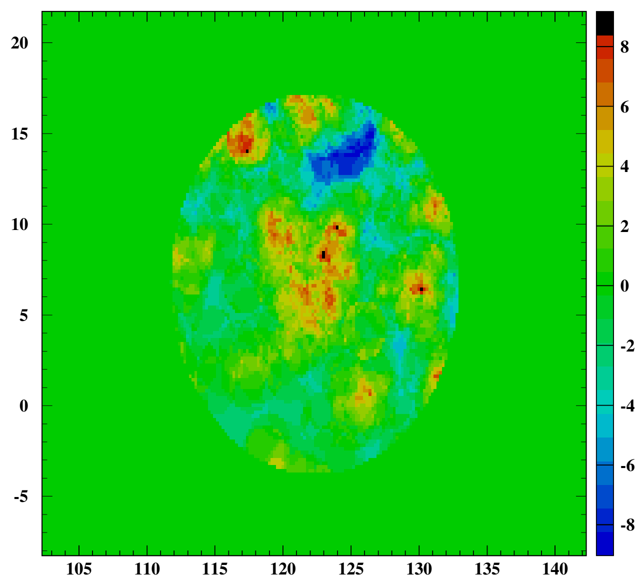

Figure 3: Sky map (background subtracted for 9 degrees around GRB021211