Announcements

- Two tower 1 minutes test runs were taken yesterday
- Special Trigger Test happens today
- E2E runs for 2 towers will follow
  - We will provide a list of runs as soon as they are processed
    - Watch out for an email in the IA list
Baseline Test Run 1/1 ~ 3000 events

- There are 0 events with Trigger Parity errors
- There are 0 events with Packet errors
- There are 0 events with TEM errors

Time of first trigger: Thu May 5 18:19:17 2005 (GMT)
Time of last trigger: Thu May 5 18:19:54 2005 (GMT)
Duration: 37 seconds
Rate: 78 hz

Reconstructed positions

Calibrated Energy Spectrum

79% single track events
14% two-track events
Baseline Test Run 1/1 ~ 3000 events

Average TKR multiplicity per plane ~ 2

Average CAL multiplicity per layer ~ 1.4

Average CAL Energy/layer ~ 10-20 MeV

Multiplicities are consistent with expectations
Baseline Test Run 1/1 ~ 3000 events

Too many zeroes?

No. of hit planes in tower 04

No. of events

Entries 2680
Mean 9.083

No. of hit planes in tower 00

Entries 2680
Mean 8.653
Discussion: Priority for Data Analysis for 2 towers

- We propose the Collaboration analyzes these runs first (would like names attached to the list)
  - 1/1 – baseline
    - Check trigger types and rates, event sizes, raw and recon distributions for tracks within one tower and across towers
    - Monte Carlo comparison
  - 2/1, 2/2 – baseline and change PDU PS values
    - First time we have a Power Distribution Unit. Could it be a source of noise? If so, can the raw distributions tell us?
  - 2/6, 2/7 – read TKR from Left or Right only
    - Cable lengths are different between odd and even numbered towers, but the DAQ takes that into account. Let’s check it by comparing raw and recon distributions from both towers. Select events that triggered at the center and at the edges
  - 4/1 to 4/4 – baseline with generator @ 1, 5, 10, 20 kHz
    - Muon distributions should not be affected by high rates from pulse generator
    - Do we understand the deadtime?
  - B2 – nominal settings TEM diagnostics enabled
    - It is just like 1/1 but with TEM diagnostics ON
  - B10 – CAL HE muon gain, 4 range readout, TEM diagnostics enabled
    - Calibrate TOT
    - measure dead strips
    - Calibrate edges of crystals
  - B13 – CAL HE muon gain, 4 range readout, Zero Suppression disabled
    - Check pedestals in the CAL
    - Trend pedestals, muon peaks, log ratios, what else?
Proposal to I&T/SE group

• Whenever the instrument is idle we should continuously collect data with configuration B10
  – CAL HE muon gain, 4 range readout, TEM diagnostics enabled
  – Maybe we will have enough events at the high energy tail of the cosmic ray distribution