LAT events with large numbers of ACD tiles with only 1-PMT above zero-suppress threshold

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Run analyzed

• B-2 run 135005345
  – TKR, CAL, CNO, periodic triggers
  – Entire LAT is on
(from last week’s meeting)
Fraction ACD tiles w/ both PMTs vs # TKR hits

Number of tiles > 40
Number of tiles < 10

Showers? Or ACD noise?
Scan of events

• Want to write out events w/ ACD tile hits > 40 and tracker hits < 10, scan
  • For noise, maybe the hits will be correlated with particular electronics boards / channels
  • How well do the tracker hits correlate with the ACD hits?

• Results
  ➢ Tracker hits do not appear to correlate with the ACD tiles w/ only 1 PMT above zero-suppress threshold
  ➢ Many events scanned had no tracker (or cal) hits at all
Condition summary for events w/ ACD tile hits > 40 and tracker hits < 10
# tiles vs fraction w/ both PMTs
(periodic triggers only)
Tile id’s for periodic triggers

Few tiles in event
all w/ one PMT only

Few tiles in event
all w/ both PMTs
Tile id’s for periodic triggers
>40 tiles in event

- Not uniformly distributed...
- No obvious correlation in electronics space
Things to do…

• Get more statistics (go through all the B-2 runs)
• Compare tile id distributions for different triggers
• Plot time distribution of >40 tile events
• Scan more events