Plans for the March 2004 test

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What remained to be understood from the previous beam test:
- 6mrad contribution to the resolution
- 12mrad vs 14mrad (is it front face vs. back face)

What else do we want to measure:
- uniformity of the radiator
- boundaries and corners, square and hexagonal tiles
- dual radiator, both set-ups
- part of the ring with the Burle 64 channel MCP-PMT

Measurements:
- Aerogel uniformity: Scan over the full aerogel tile with enough statistics
- Same tile back vs front face, several samples
- Dual radiator set-up two rings, few inc. angles
- Dual radiator set-up focusing, few inc. angles
- Lens as a focusing device – test for the June HPD beam test, maybe try it on the Burle MCP-PMT

Statistics needed
- Uniformity: <5% error on 1cm^2-> 1000 events -> 100k for each tile
- Boundaries: similar requirement

All in all: need several M. Last time recorded 2.8M, sounds OK.

Run 2002 experience: see fig. below

Total event recorded: 2.867.149
Accepted events: 7%

Legend to plots:
*left plots: quantity as a function of run number
*right plots: quantity distribution

Rows:

Rate: Data Taking Rate
MWPC: Efficiency for reconstructed track
blen(R1).eq.256: Fraction of events with all Flat panel ADC information
nonshifted: fraction of useful events without buffer shift
NHIT(R1): fraction of events with at least one hit in RICH 1
Accepted events: Number of accepted even

➞ needed a higher efficiency

For the next beam test
- modify the trigger – include MWPC (was done at the end of the beam test in Nov 02 – see plots)
- work on read-out: fraction of events with complete ADC information from RICH1
- work on read-out: repair the problem of the shifted buffer

Beamtest 2002 - Run Efficiences