

Tape Storage for Run 9

Run 8: $\sim 2.5 \times 10^9$ good mu- stops (4 weeks) + 10 days of calibration runs
we should have used ~ 45 tapes = 9 TByte

Run 9 fall'05: 4 weeks test & setup
4 weeks data taking
kicker working 20->40 kHz rate, but no pileup = less total muons ?
present pileup cut = 69%
FADC boards working

estimate: total 10^{10} events = 2 times run 8 = 90 Tapes (w/o kicker)
 total 10^{10} events = 3 times run 8 = 140 Tapes (w kicker)

add 10% for FADC readout of special events
add 10% for gamma-discriminated n-counter readout

total fall 05: 170 tapes presently (26/04/05: 1 Tape = 41\$ (tape4backup.com))
total = 6970 \$

+ WFD ??:?

WFD: (very crude estimate)

Tim: MuLAN: ~ 80 boards - 10^{11} events $\rightarrow 20$ TByte

MuCAP: ~ 16 boards $\sim 10^{10}$ events $\rightarrow 20/16/10 = 400$ GByte

Pileup: 85% $\rightarrow 400 * 7 \rightarrow 2.8$ TByte for WFD = 14 Tapes Extra = 560\$

total fall 05:

170 tapes presently (26/04/05: 1 Tape = 41\$ (tape4backup.com))

6970 \$

14 Tapes Extra 560\$

185 Tapes 7530 \$

Spring 06: 10 weeks of data taking : 20% more tapes = ~ 230 Tapes
10120 \$ with present prices