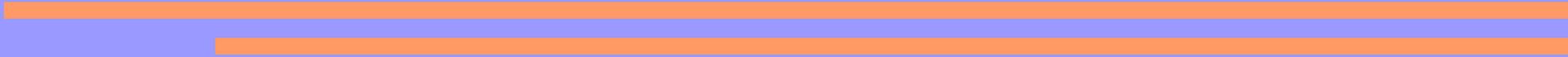


CKOV Reconstruction Status

Nick Graf
Indiana University
July 22, 2005



Progress Made So Far

Pedestals

- Mostly finished (D. Lange)
- Some failures to correct
- Need to load results to database

Noisy Channels

- Decision based on pedestal width
- Ready to go once pedestals are finished?

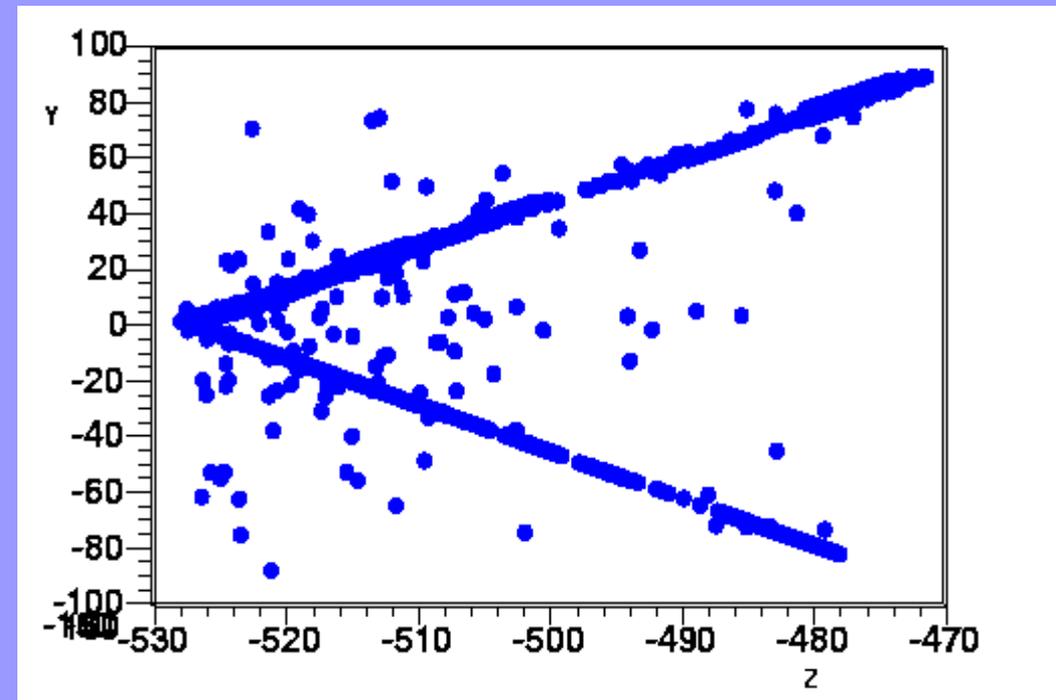
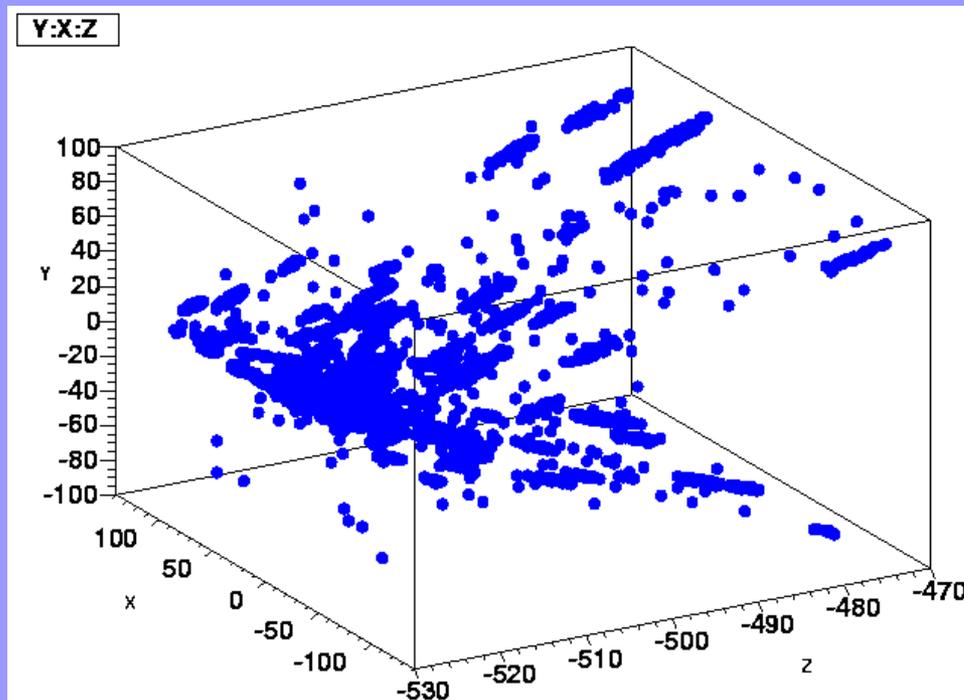
Monte Carlo

- Ckov geometry in place
 - Mirror hits being produced
 - Needs digitization
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Current Work

MC Digitization

- Mirror hits being produced
- Can map out mirror locations



Digitization Continued

Need to convert hits to ckov digits

- Predict number of photons using formula from Dave Christian's note

$$N = N_{\max} [1 - (p_{\text{thresh}}/p)^2]$$

- Convert number of photons to an ADC value
- Calibrate this relation with beam events
- Predict TDC value somehow using time of flight value from MC

Remaining Taks

- Determine dead ADC channels
 - Assess dead/noisy TDCs
 - Project tracks to ckov mirrors
 - Re-evaluate dead/noisy ADC/TDCs with tracking information
 - Gain Calibration
 - Implement PID algorithm
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