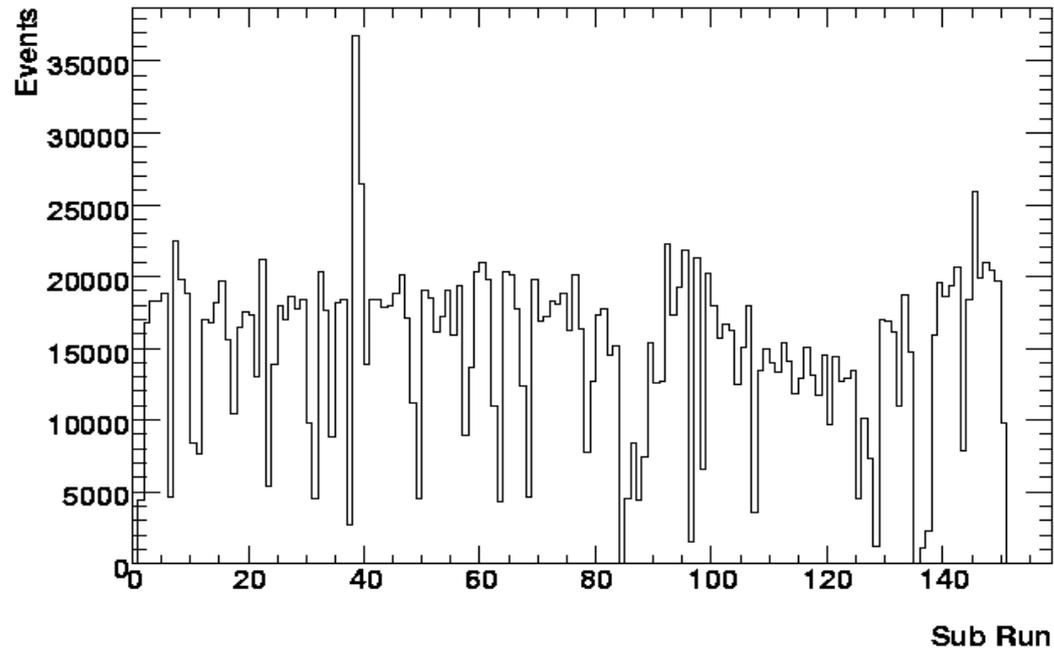


# Kaon Mass Data First Look

Nick Graf  
February 23, 2006

# How Much Data So Far?



From runs database:

Events: 2,679,275

Beam Triggers: 33465 (1.2%)

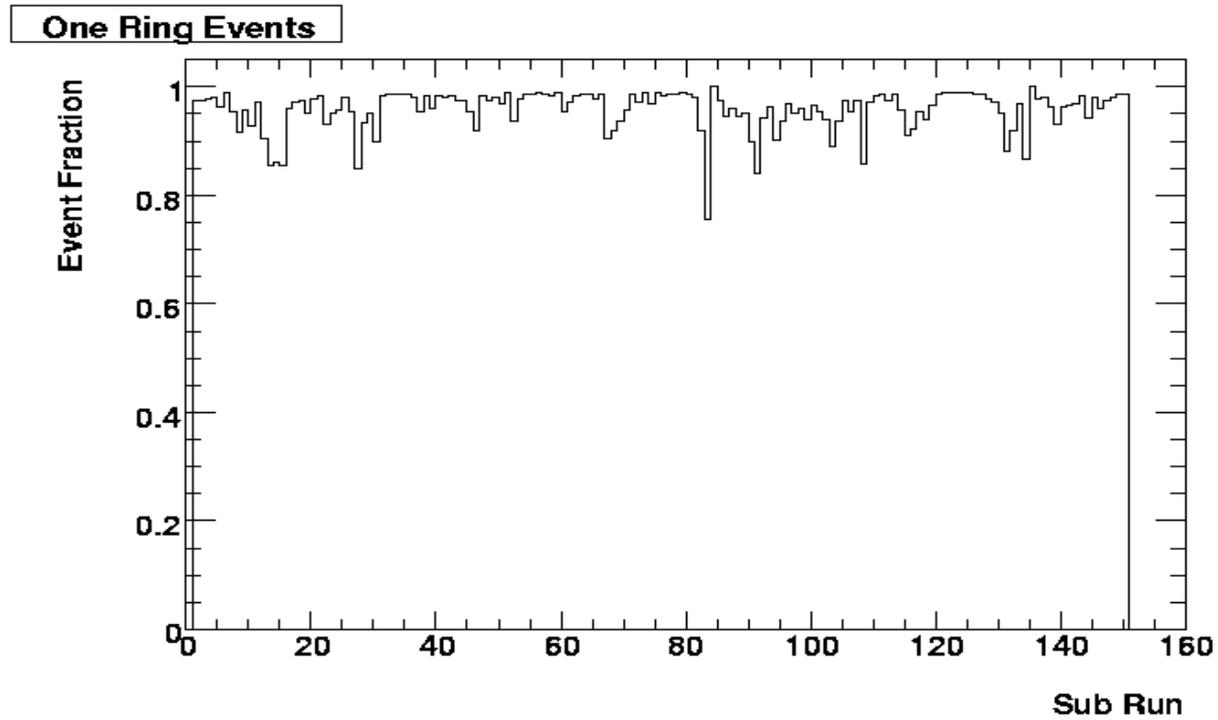
Kaons: 837,673 (31.2%)

Pions: 936,754 (34.9%)

Protons: 871383 (32.5%)

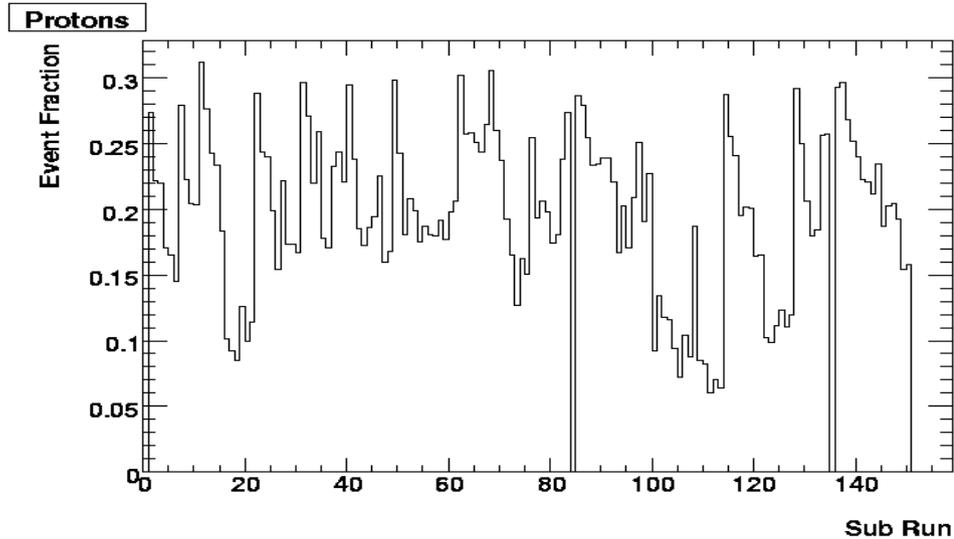
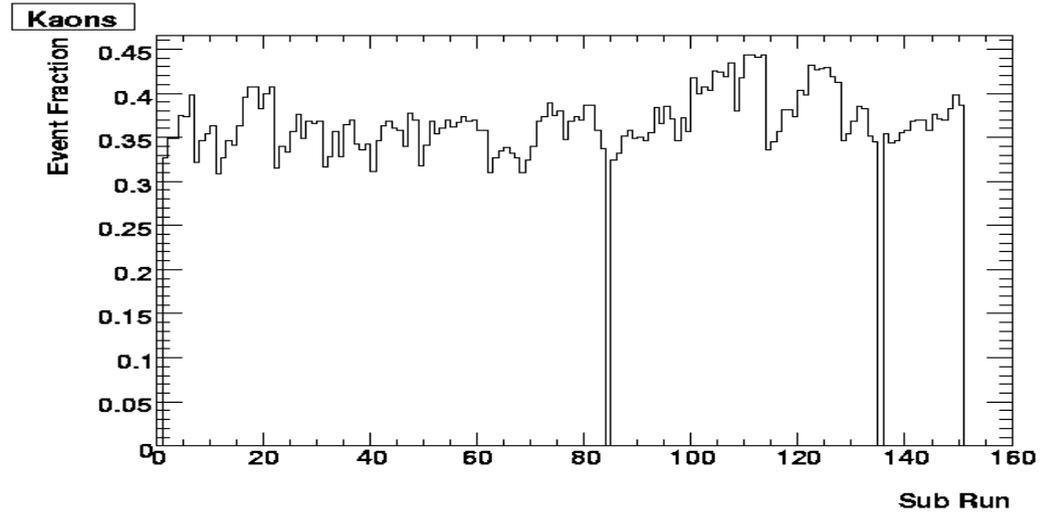
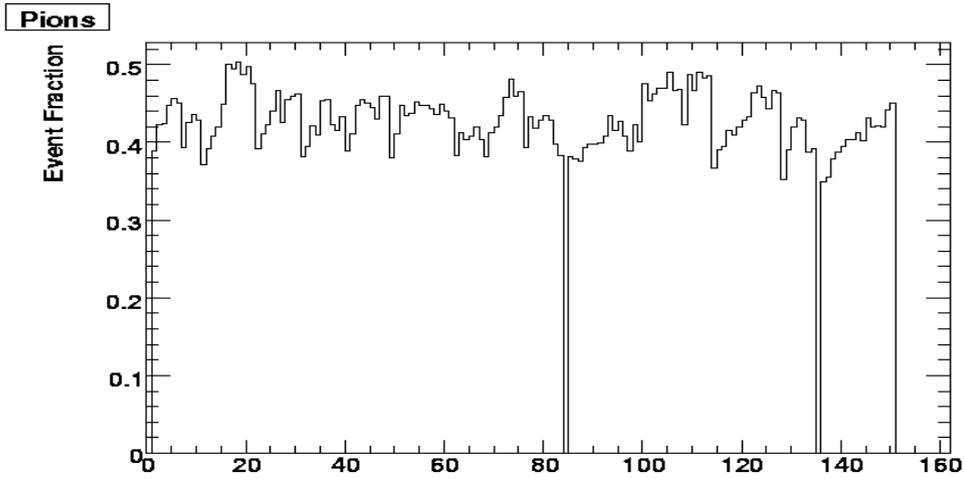
Avg. Events per subrun: 14,775 (Over 150 subruns)

# Data Quality



Avg. Fraction of single ring events: 95.8%

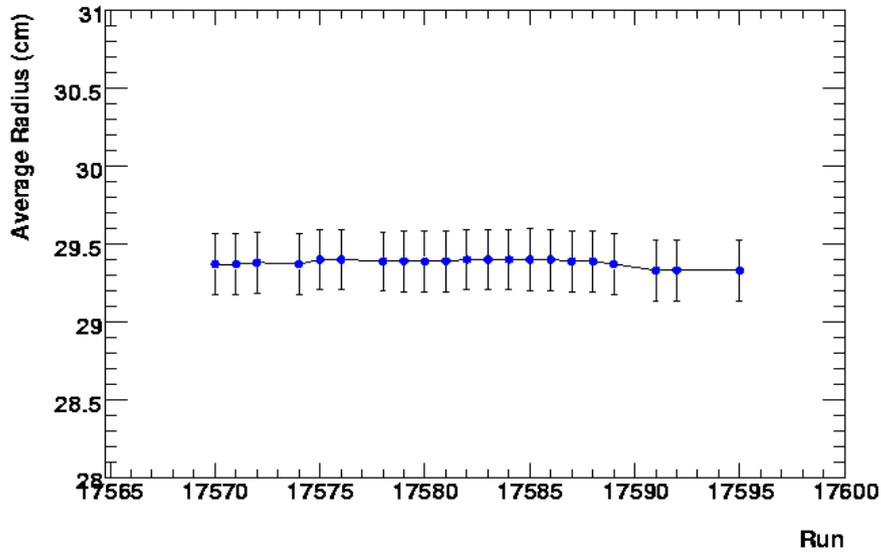
# Pion/Kaon/Proton Ratios



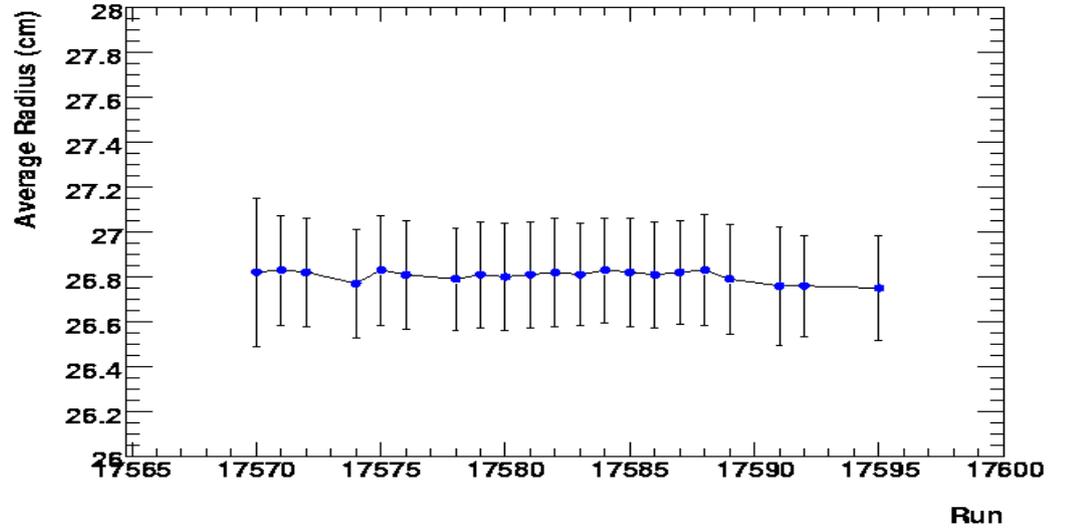
Avg. Pion Fraction: 36.2%  
Avg. Kaon Fraction: 36.2%  
Avg. Proton Fraction: 19.6%

# Ring Center Stability

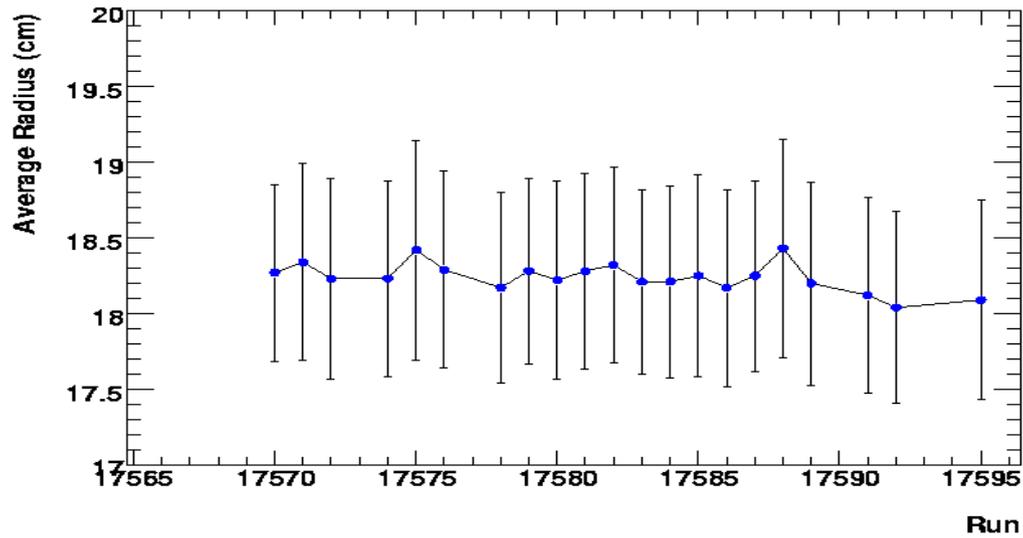
Pion Rings



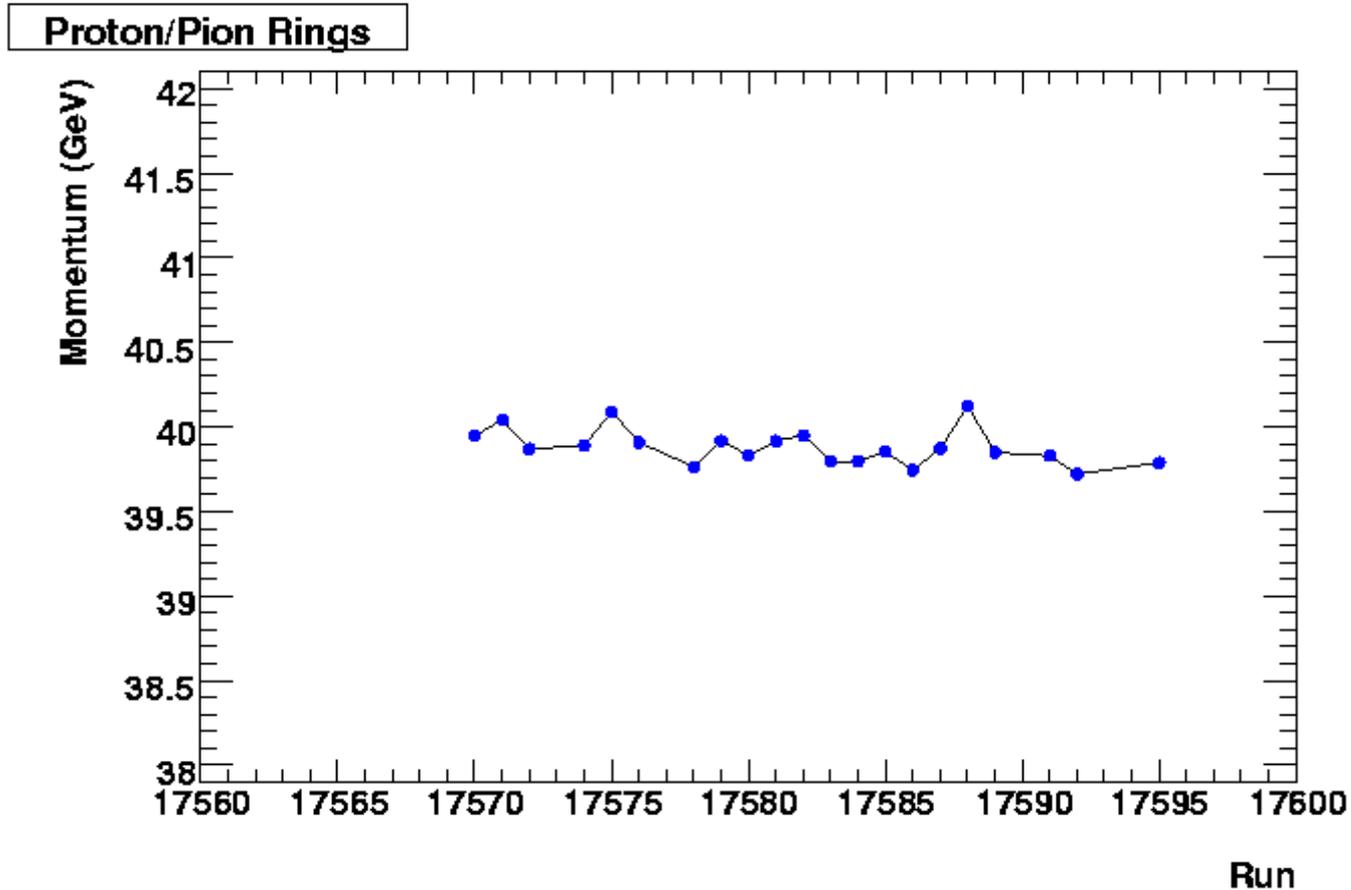
Kaon Rings



Proton Rings



# Momentum Stability



Momentum from pion/proton peaks:

$$p^2 = (M_{\text{proton}}^2 - M_{\text{pion}}^2) / (\Theta_{\text{proton}}^2 - \Theta_{\text{pion}}^2)$$

See MIPP note 53