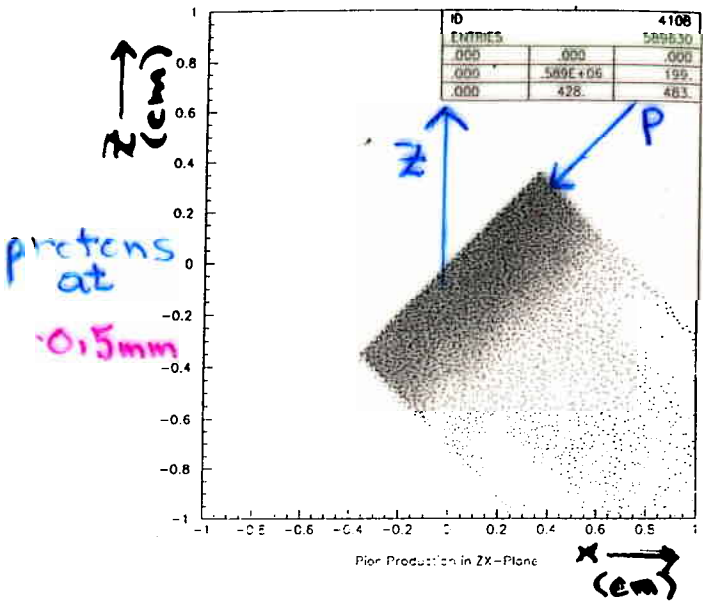
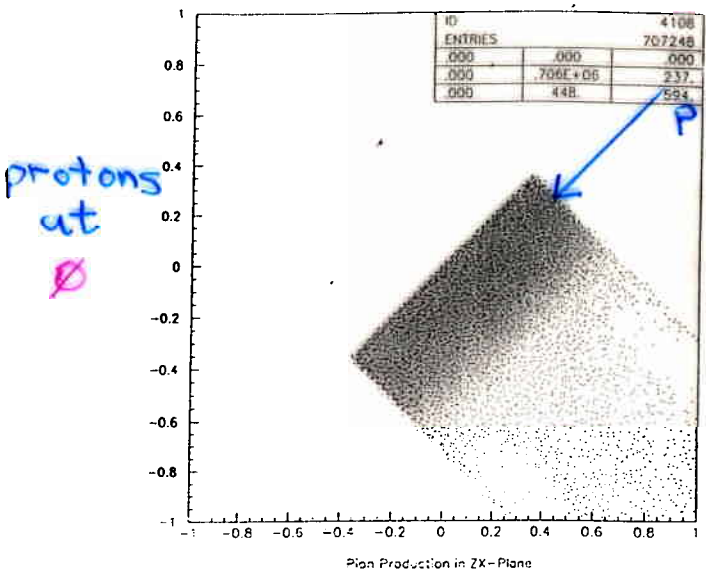
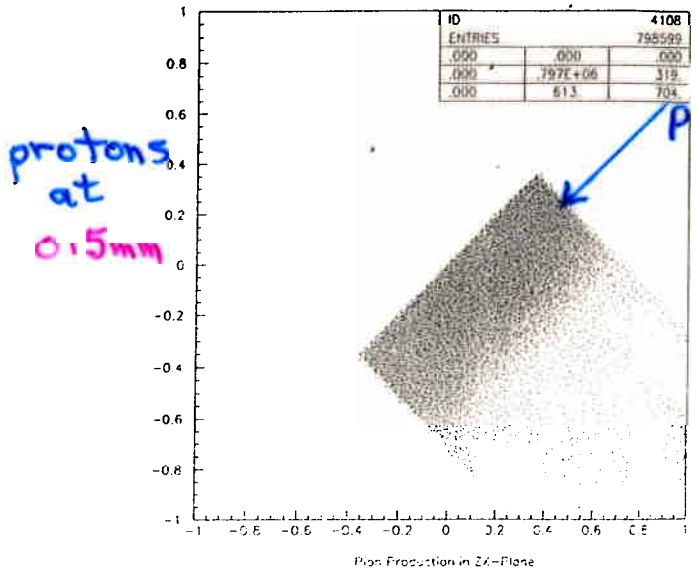


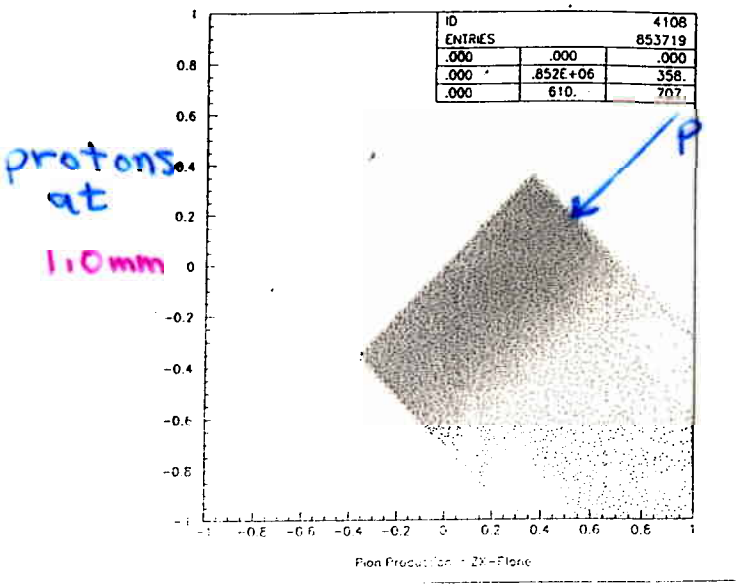
protons at 0.5mm



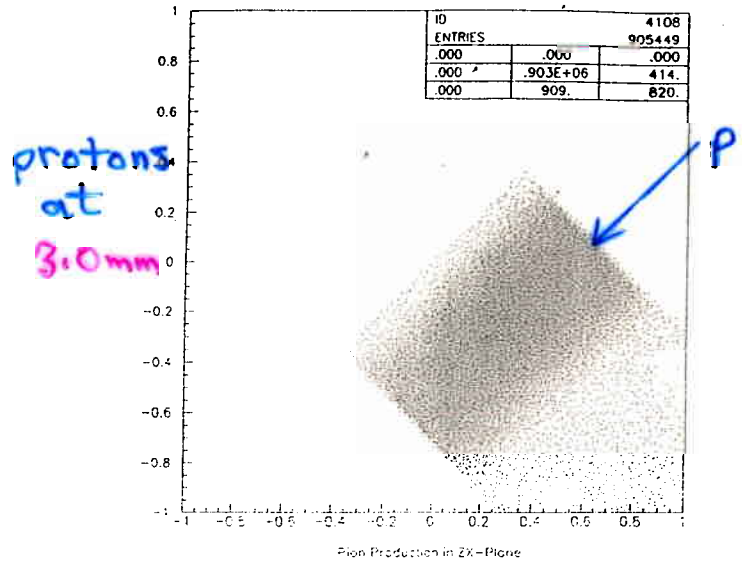
protons at ∅



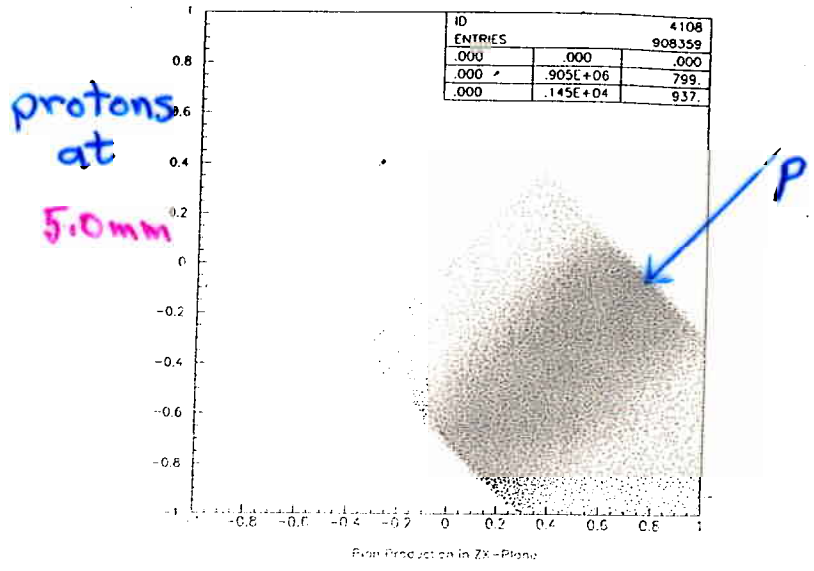
protons at 0.5mm



protons at 1.0mm

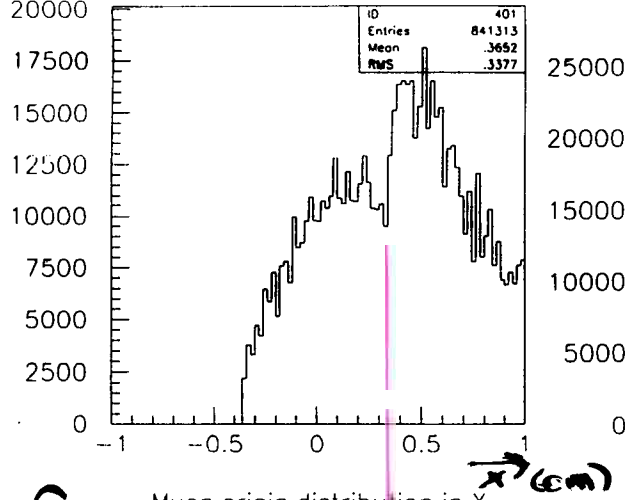


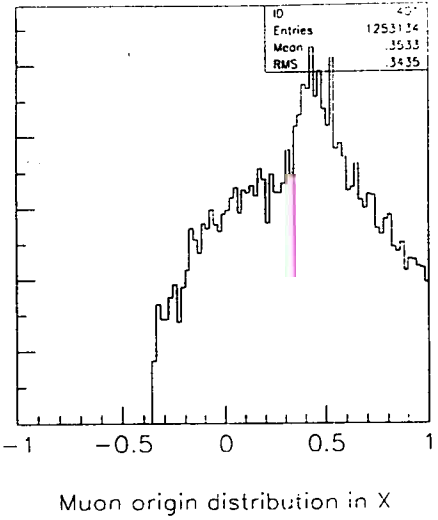
protons at 3.0mm

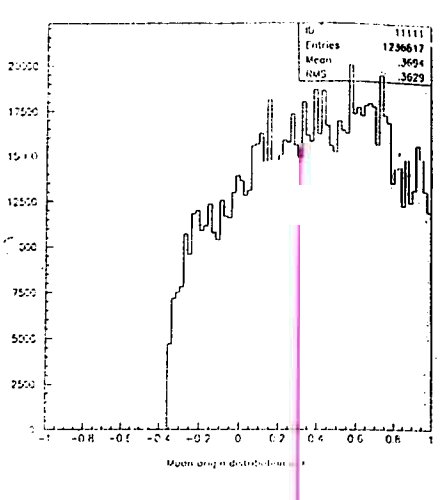


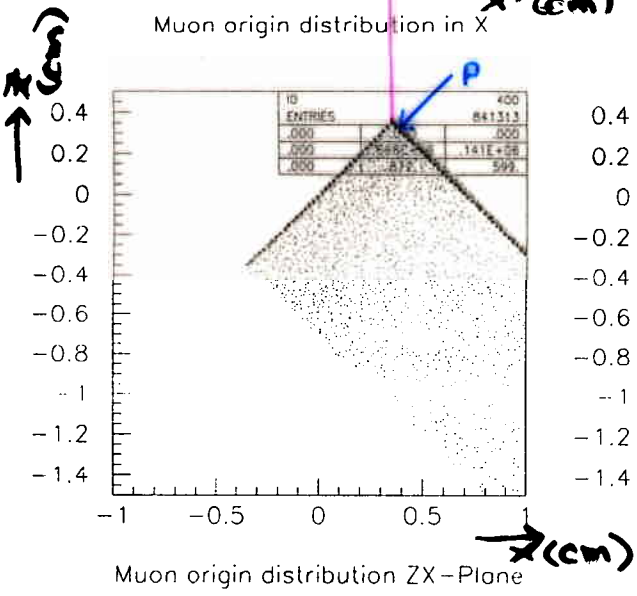
protons at 5.0mm

* edge of production target = -1 mm

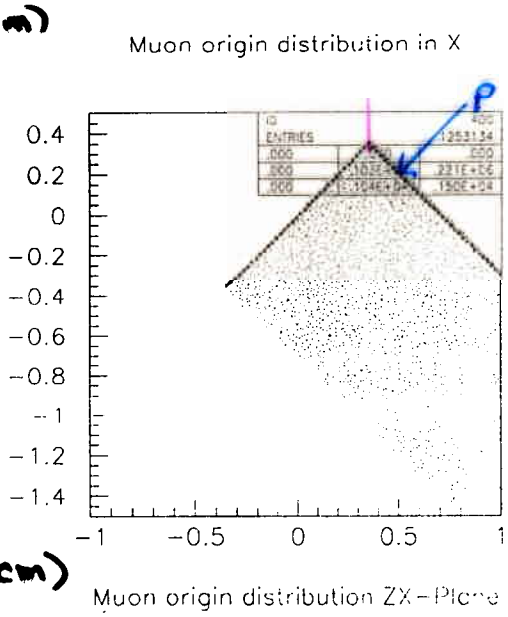




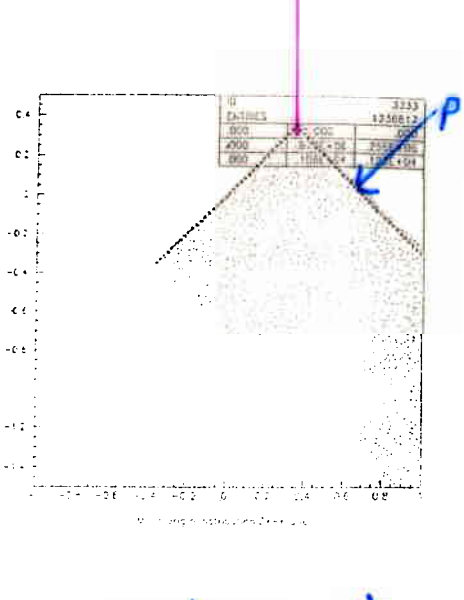




protons at −0.5mm

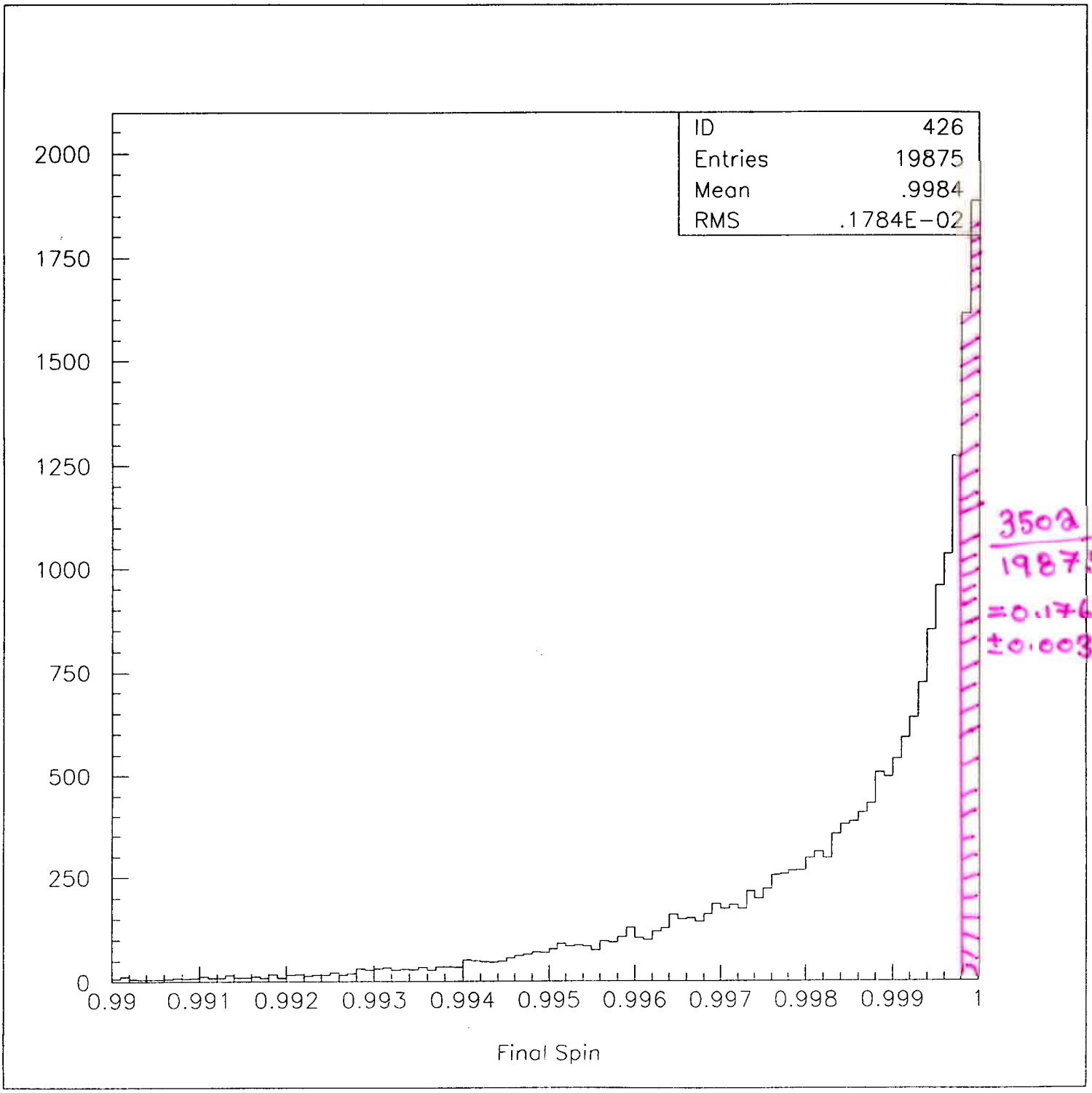


protons at 1.0mm

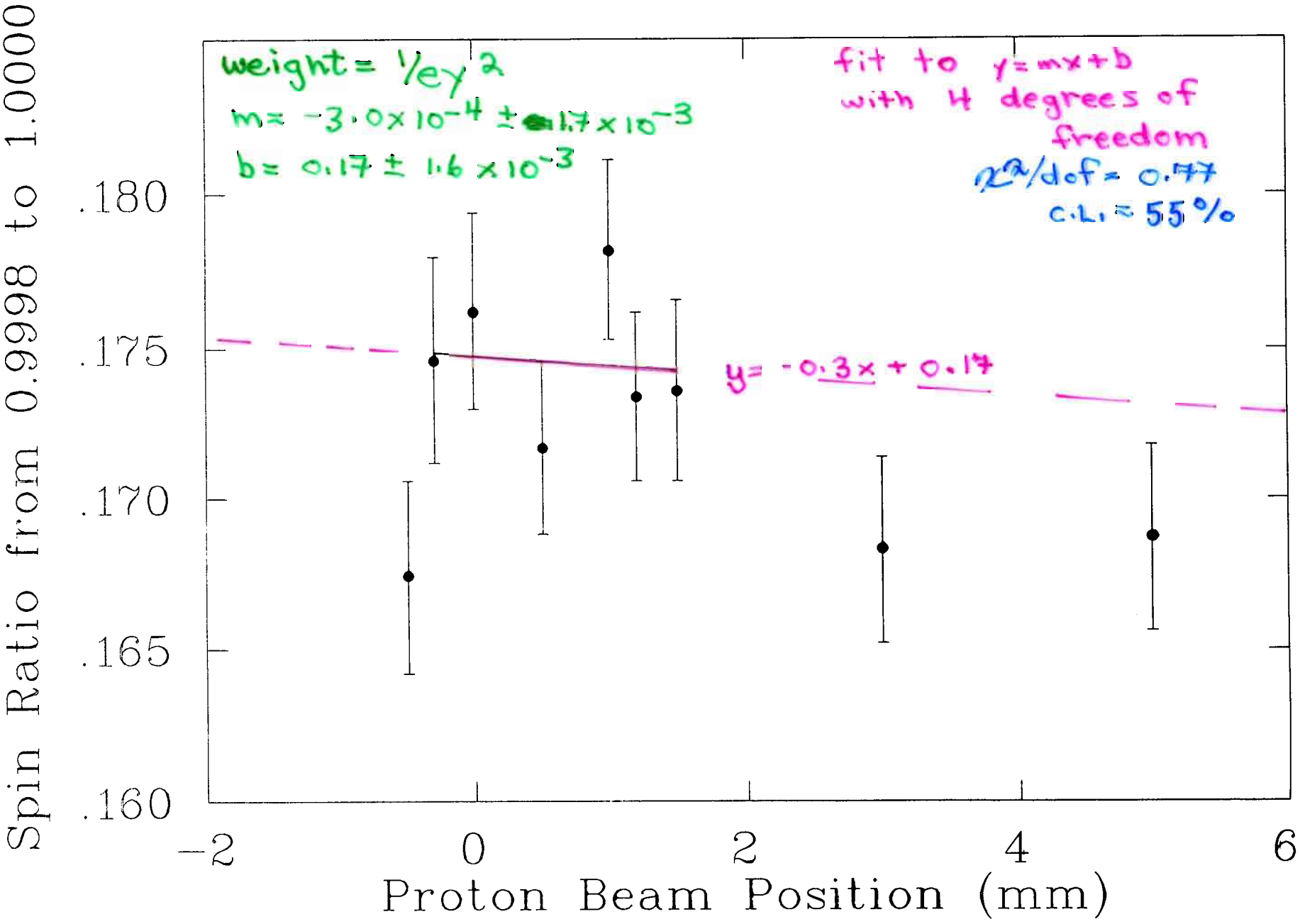


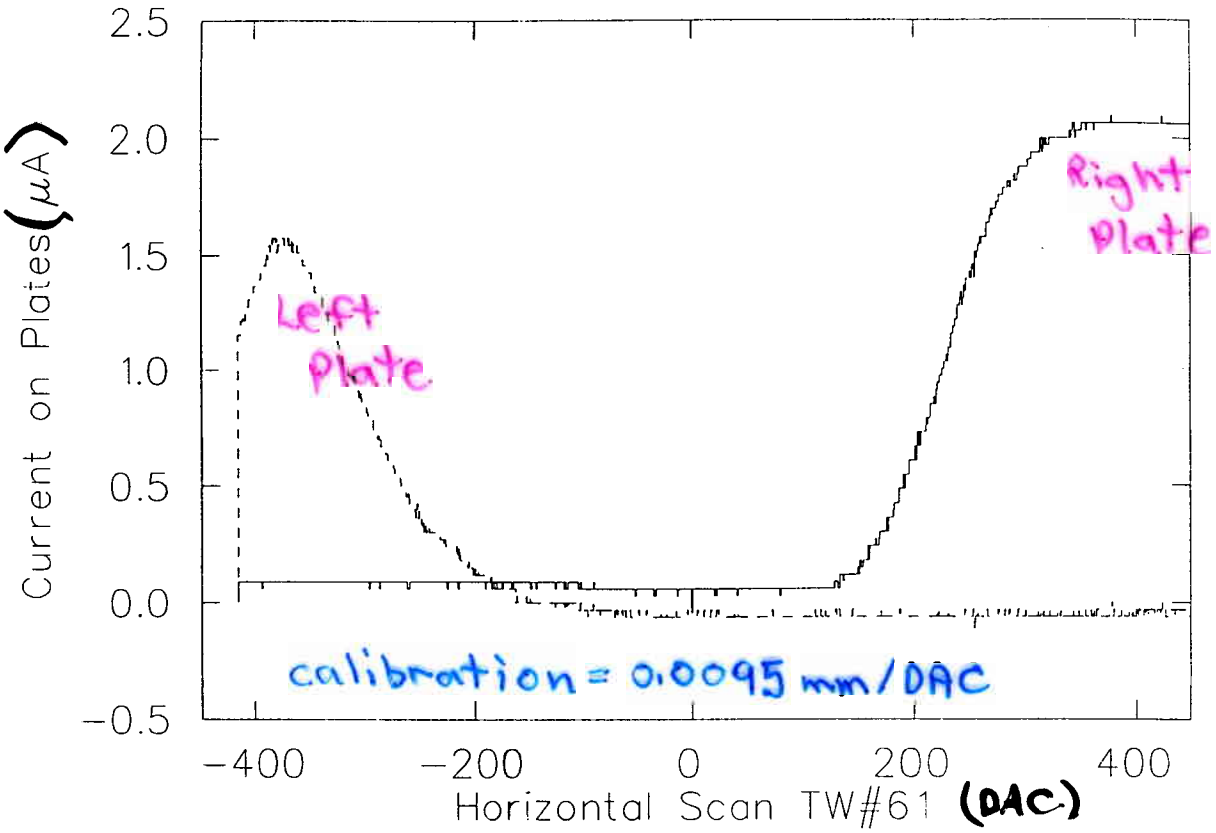
protons at 3.0mm

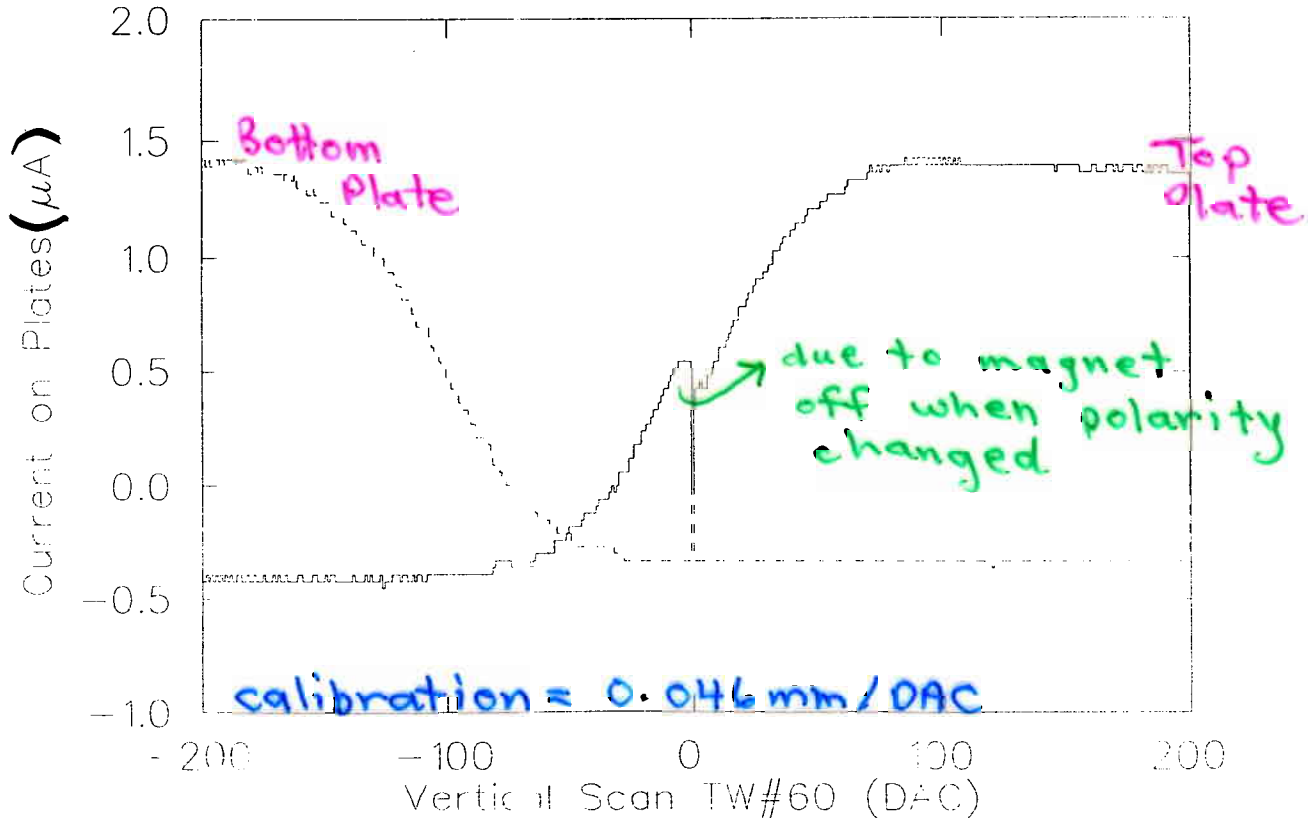
Where Muons Originate in T1



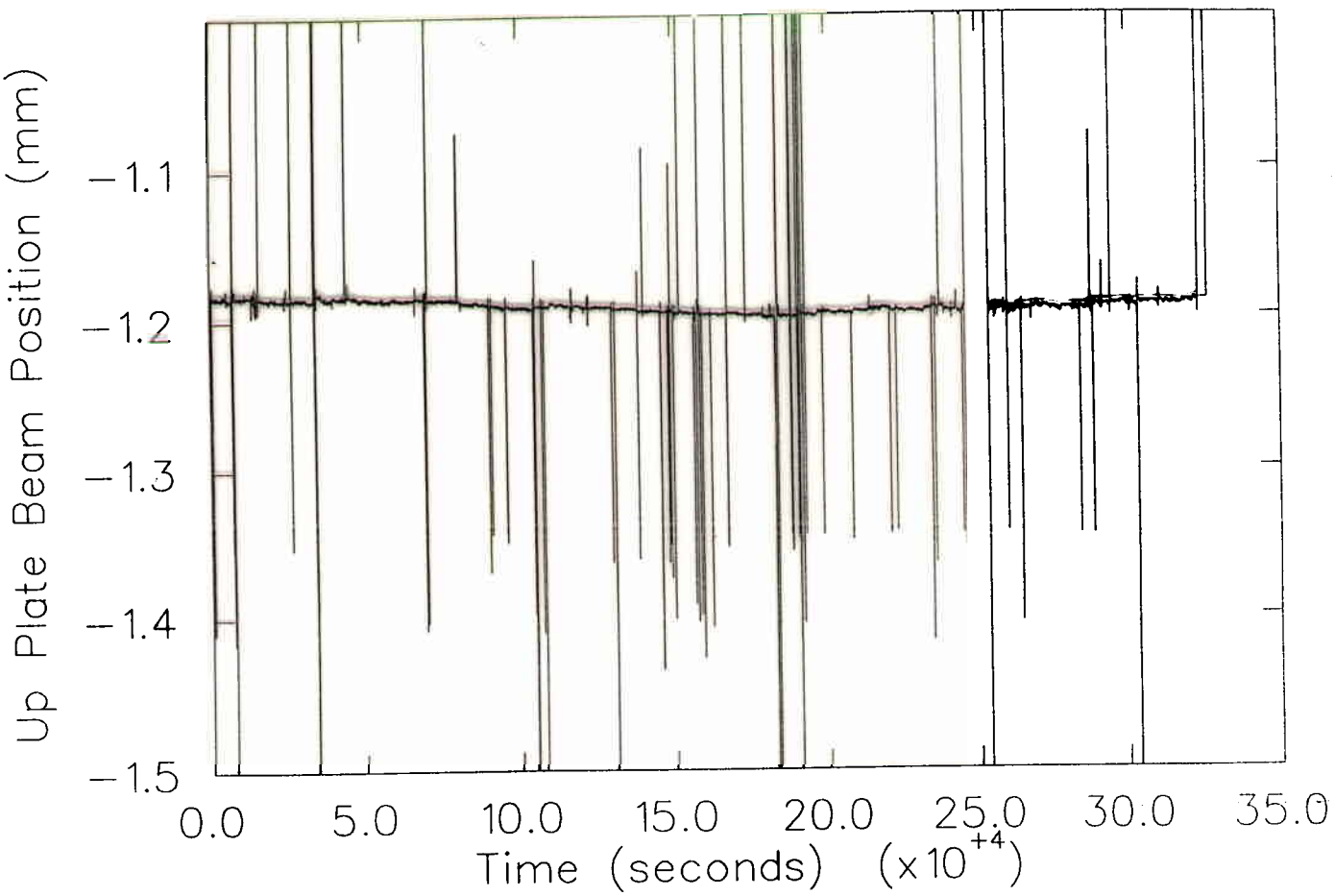
beam in the center of the solenoid

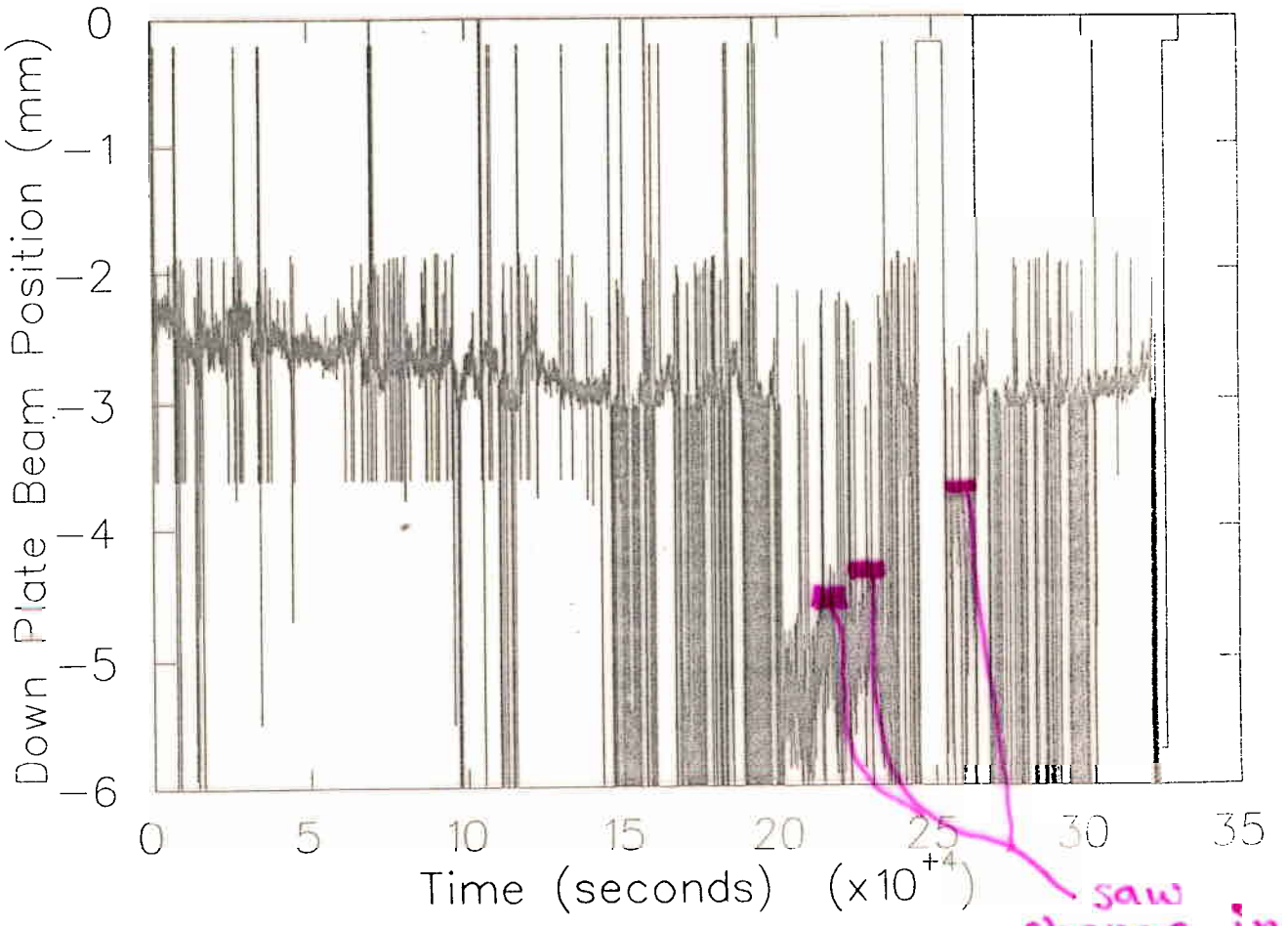

weight = 1/ey^2
m = −3.0 × 10^−4 ± 1.7 × 10^−3
b = 0.17 ± 1.6 × 10^−3
fit to y = mx + b
with 4 degrees of freedom
χ²/dof = 0.77
C.L. = 55%
y = −0.3x + 0.17
Spin Ratio from 0.9998 to 1.0000
.180
.175
.170
.165
.160
−2
0
2
4
6
Proton Beam Position (mm)





- done Aug 20/2000 with 2uA
- stripper foil was Al not carbon! thus different beam spot





- data taken May 19, 20, 21, 22 (96 hours)

New T1 Protect Monitor?

- current T1 protect monitor replaced ~ every 2 years due to breakage or reasons affecting its performance

- TRIUMF must have 2 spare T1 protect monitors on site and are built here by Dan Gray

- to change right/left plate separation distance would take less than 3 weeks and if charged money would only be shop costs (less than $2000– mostly paying for ceramic spacers)

- Dan Gray also has spare 1AMT1 wire chamber

- all these items fit onto the target ladder as does the T1 carbon target

- remote handling estimates minimum 4 days to replace t1 target not including moving blocks, etc , could replace T1 protect at same time and add 3-4 days for alignment