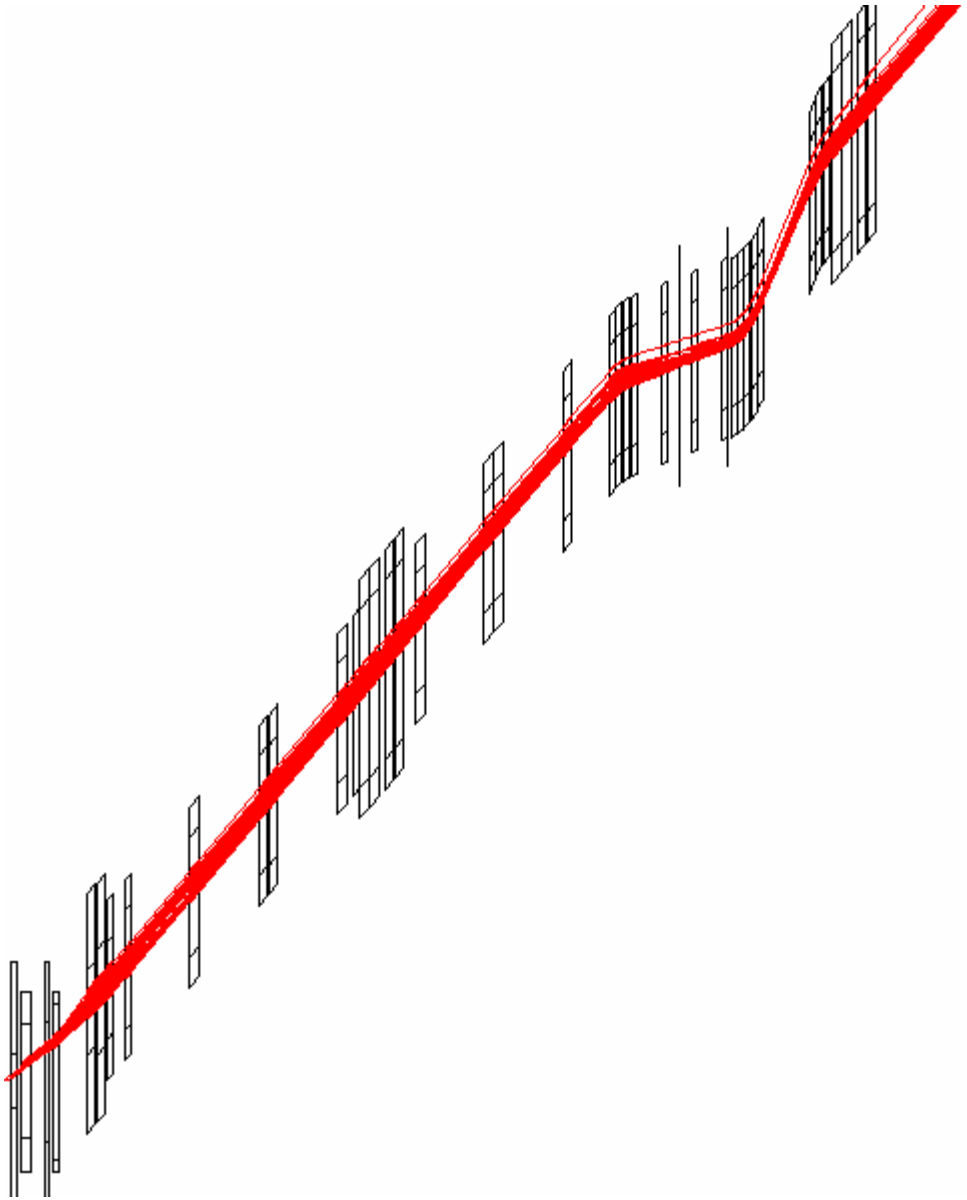
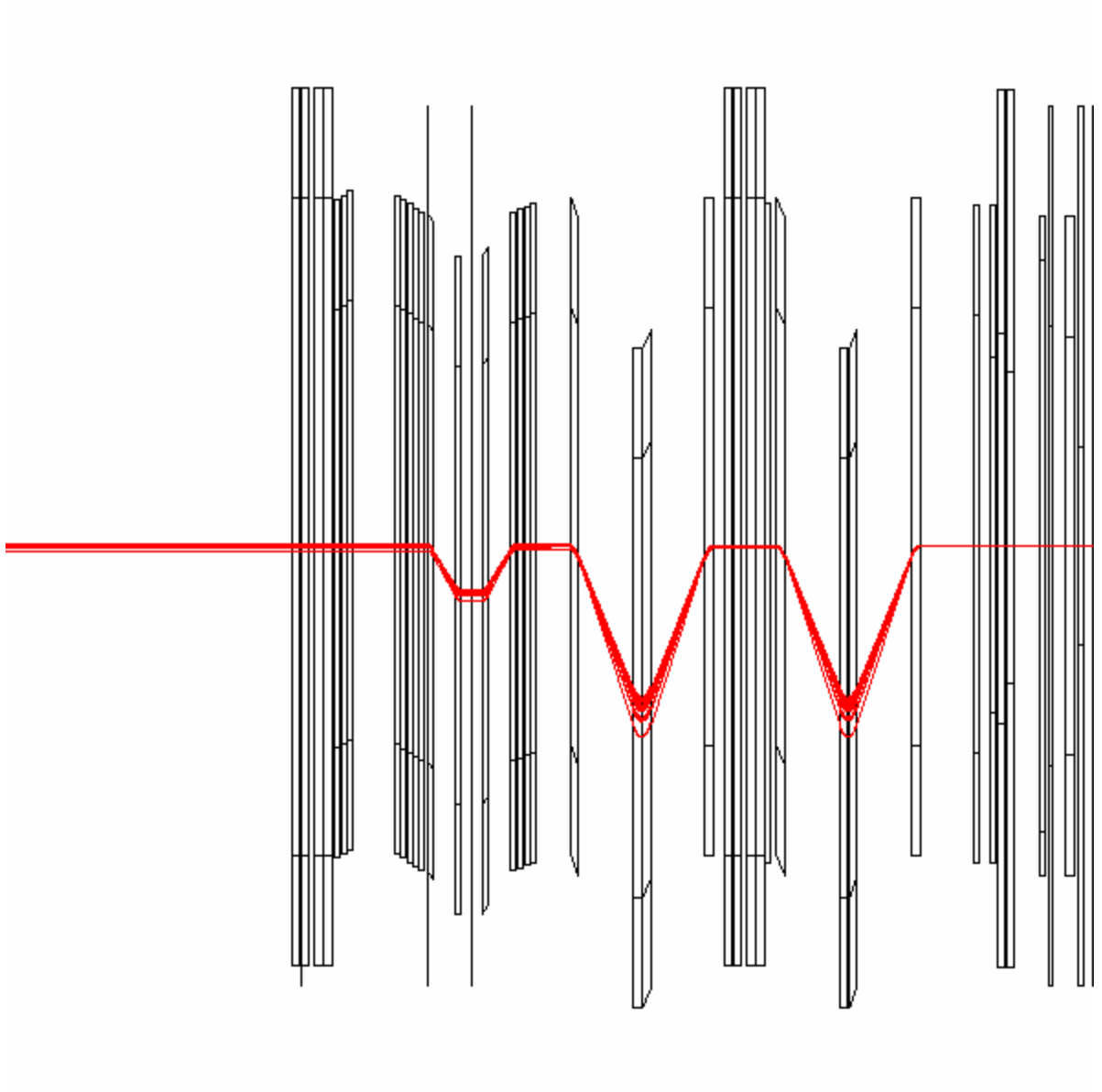
2mr plots

Plan View

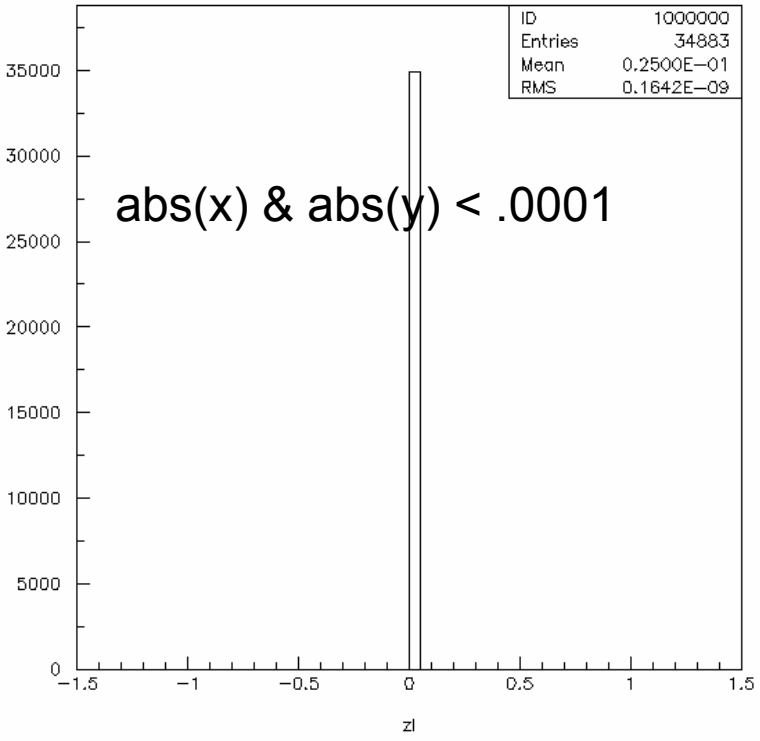


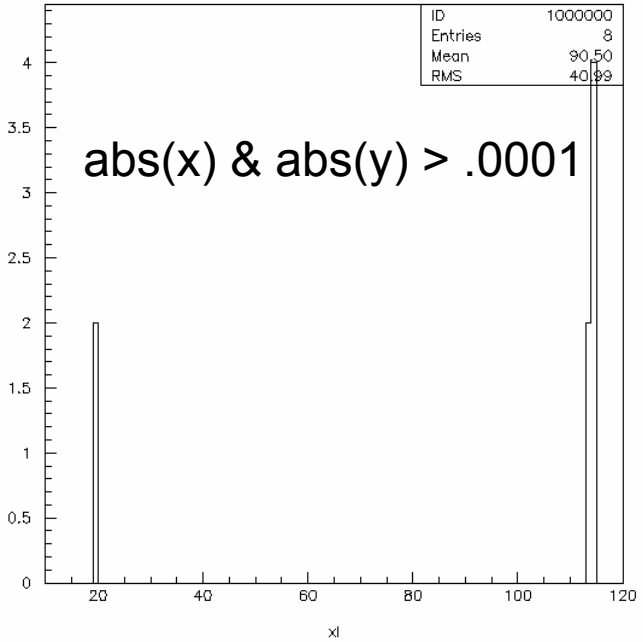
Compton IP

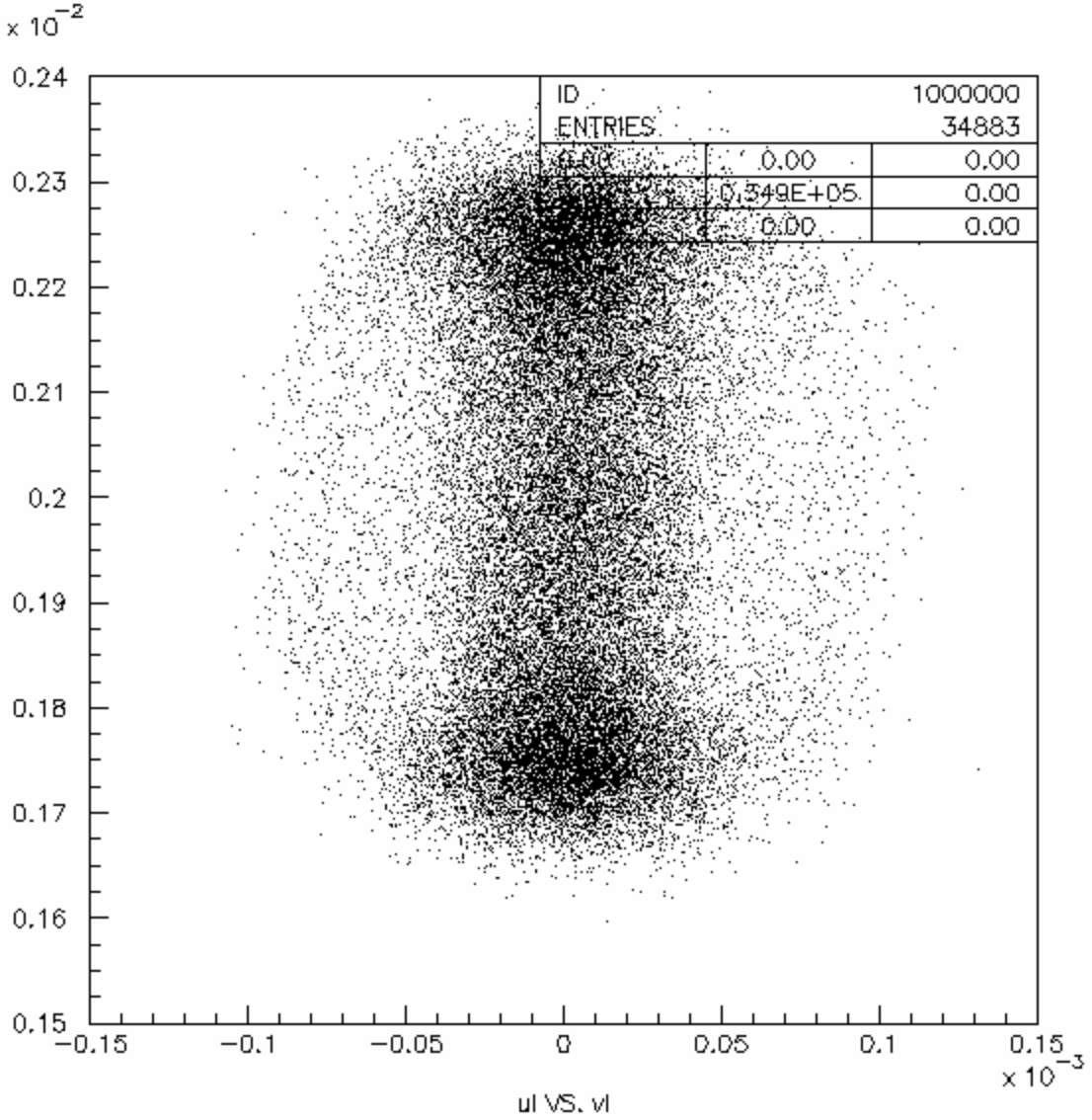
Side View



Distributions at IR





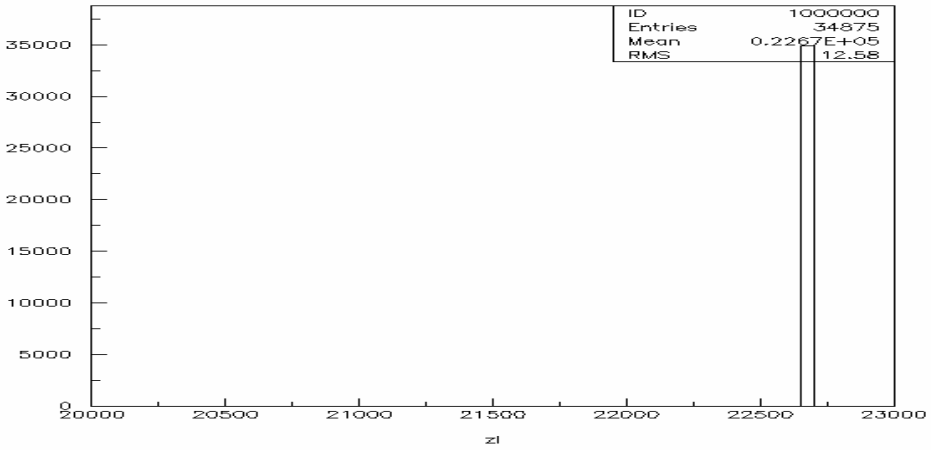


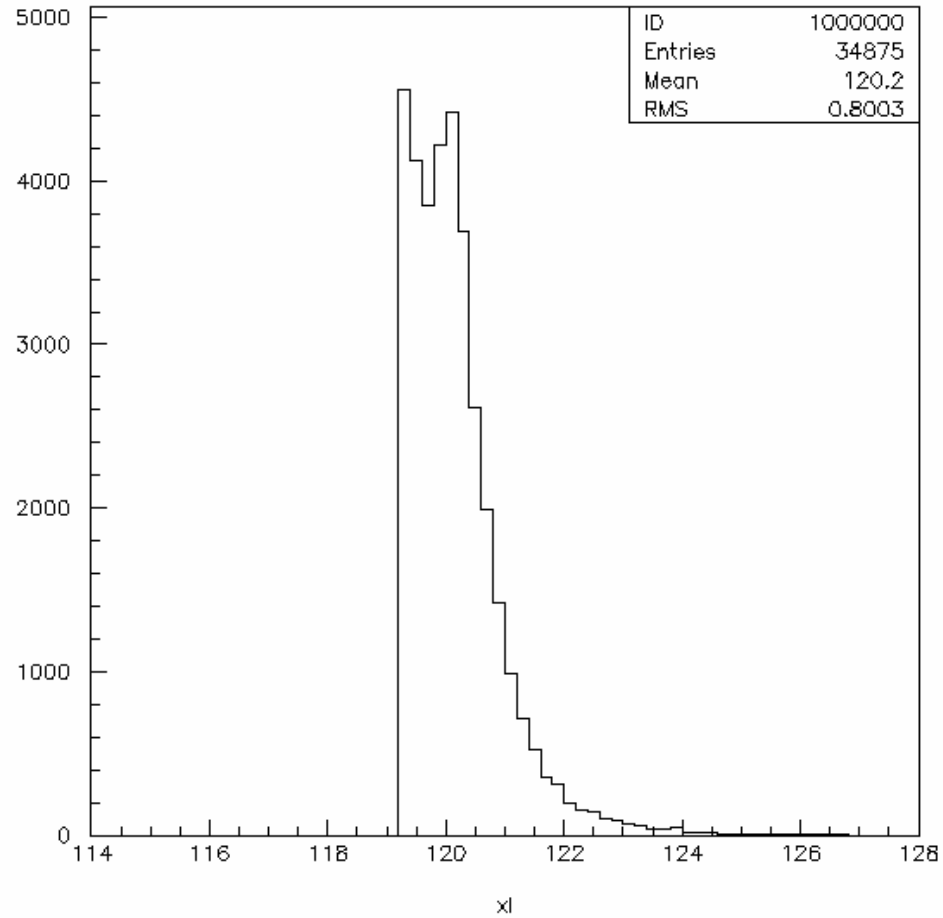
Note there are 8 tracks that circle back to the IR

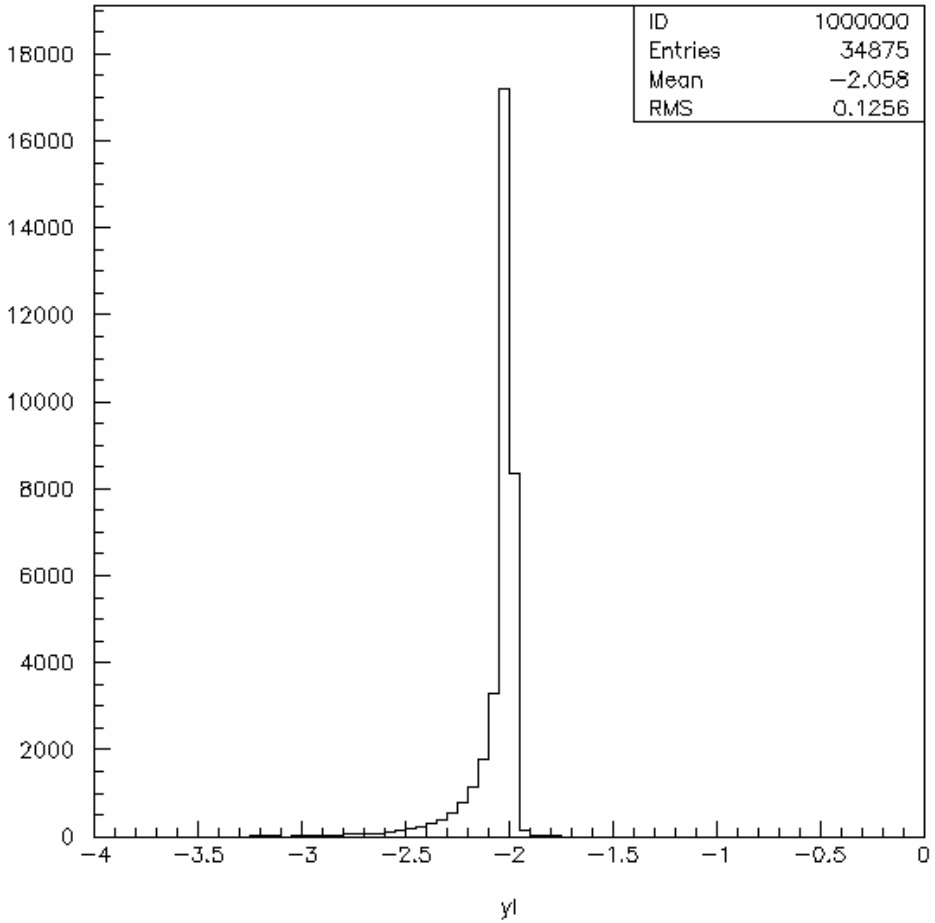
Distributions at Compton IP
x, y, z

Note there are 8 out of 34883 beam particles lost between the 2 mrad IR and the Compton IP

No particles are lost for the 20 mrad IR

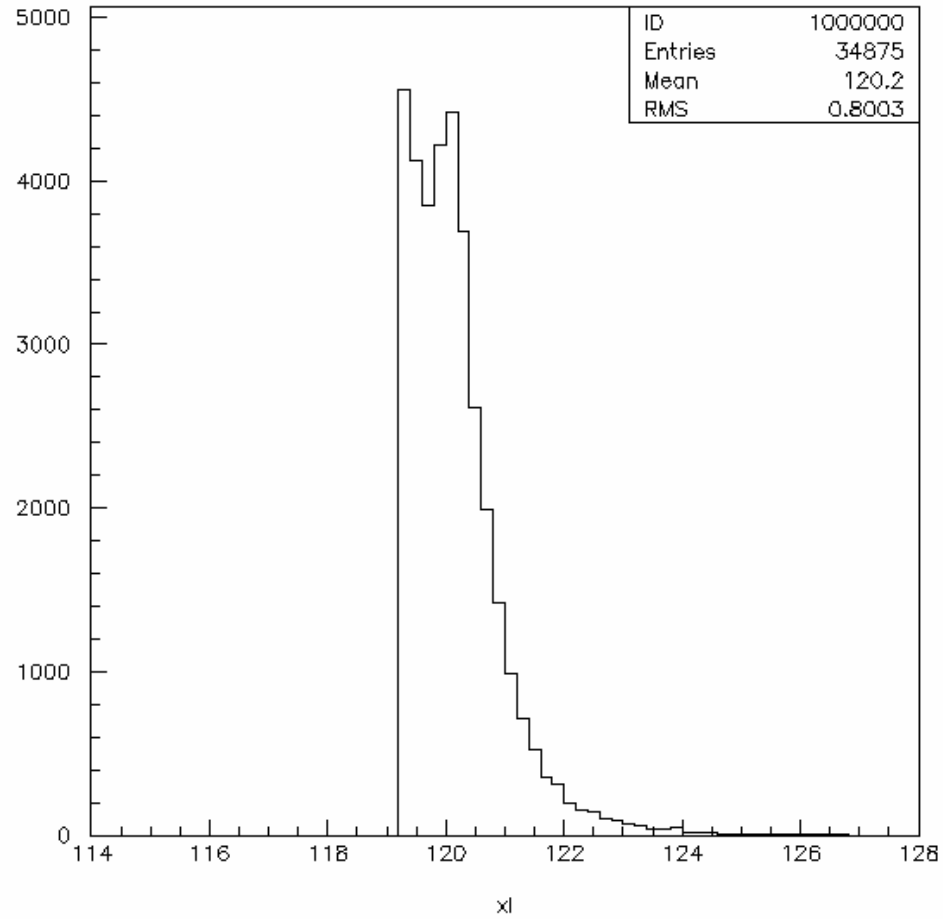


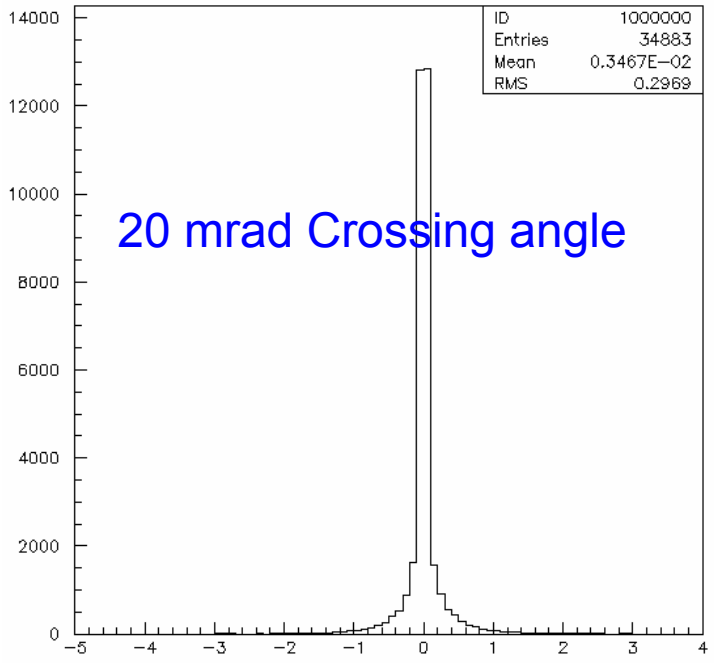


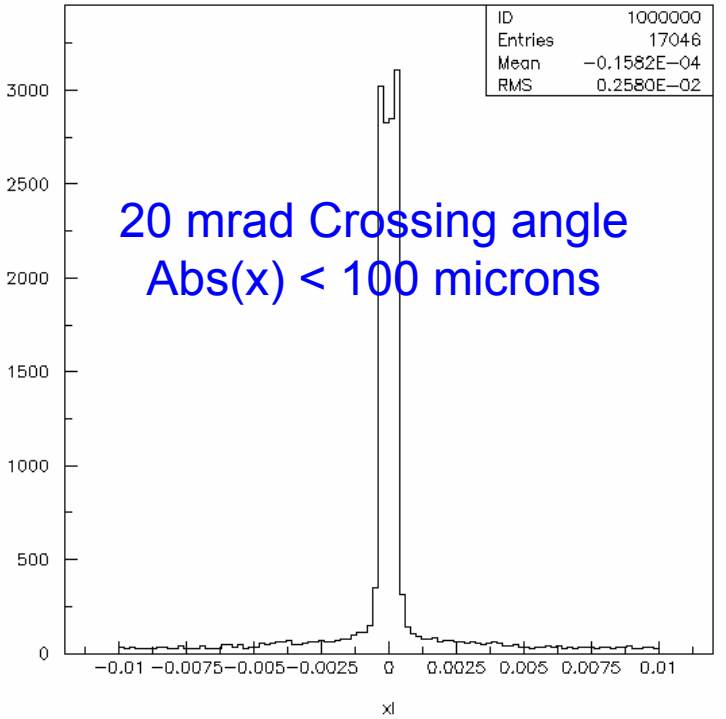


x distribution comparison between 2mrad and 20mrad

2 mrad crossing angle
RMS = 8.003 mm

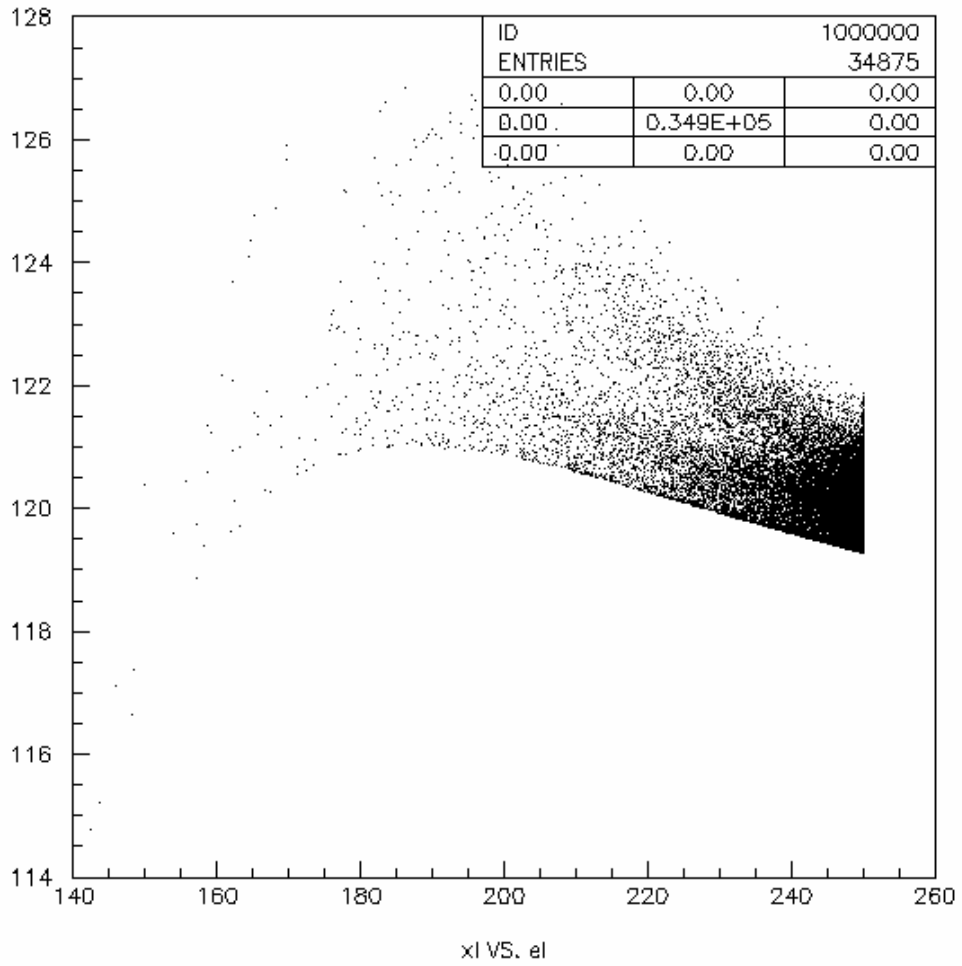




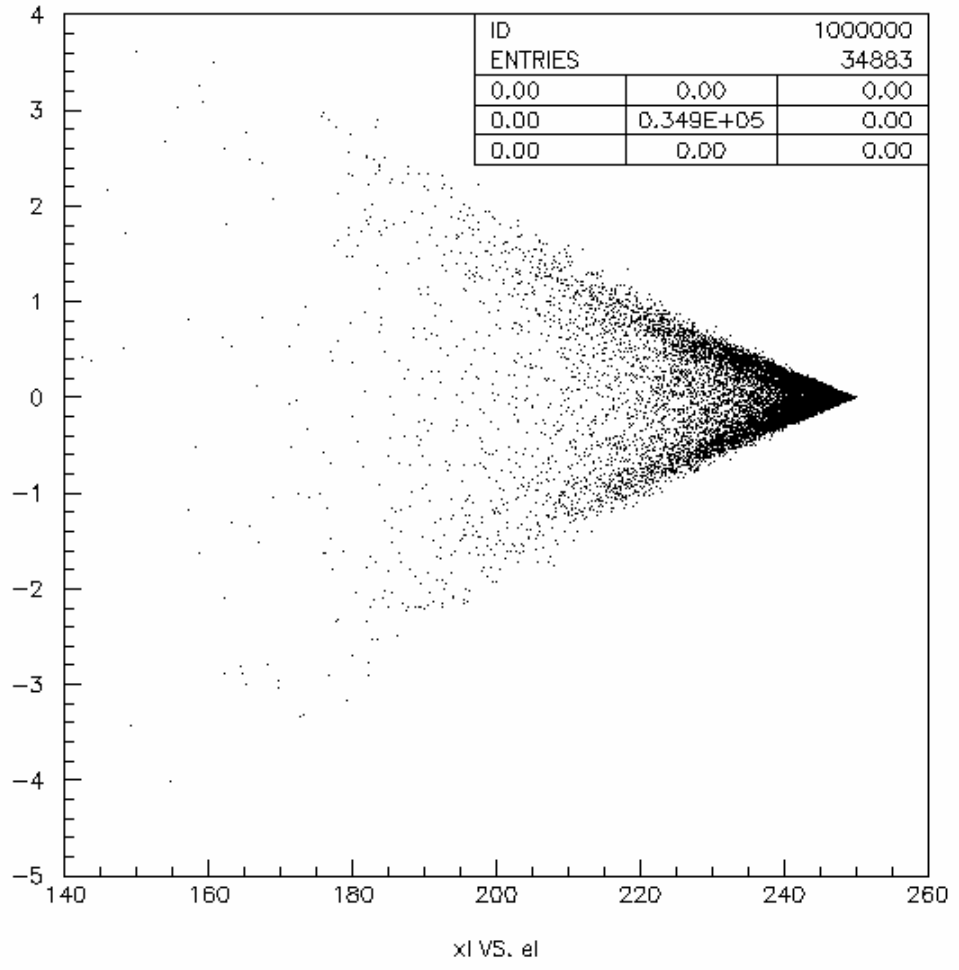


x distribution vs E comparison between 2mrad and 20mrad

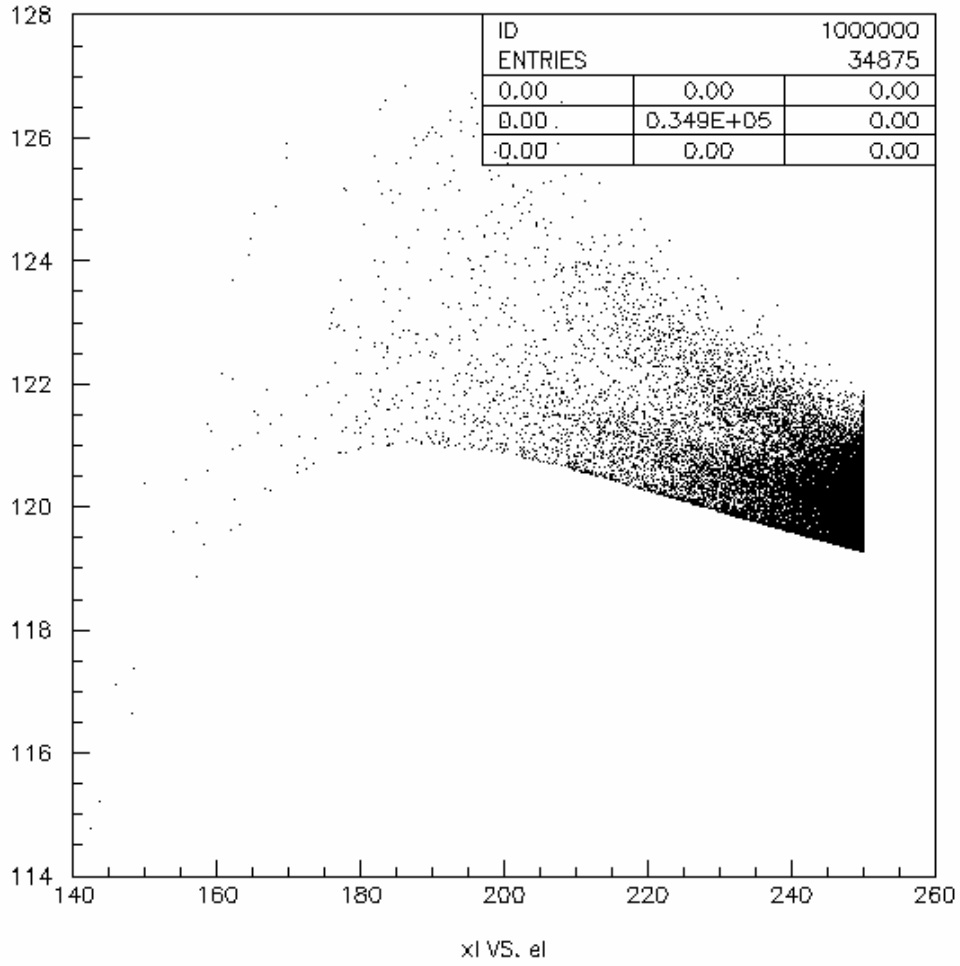
2 mrad crossing angle

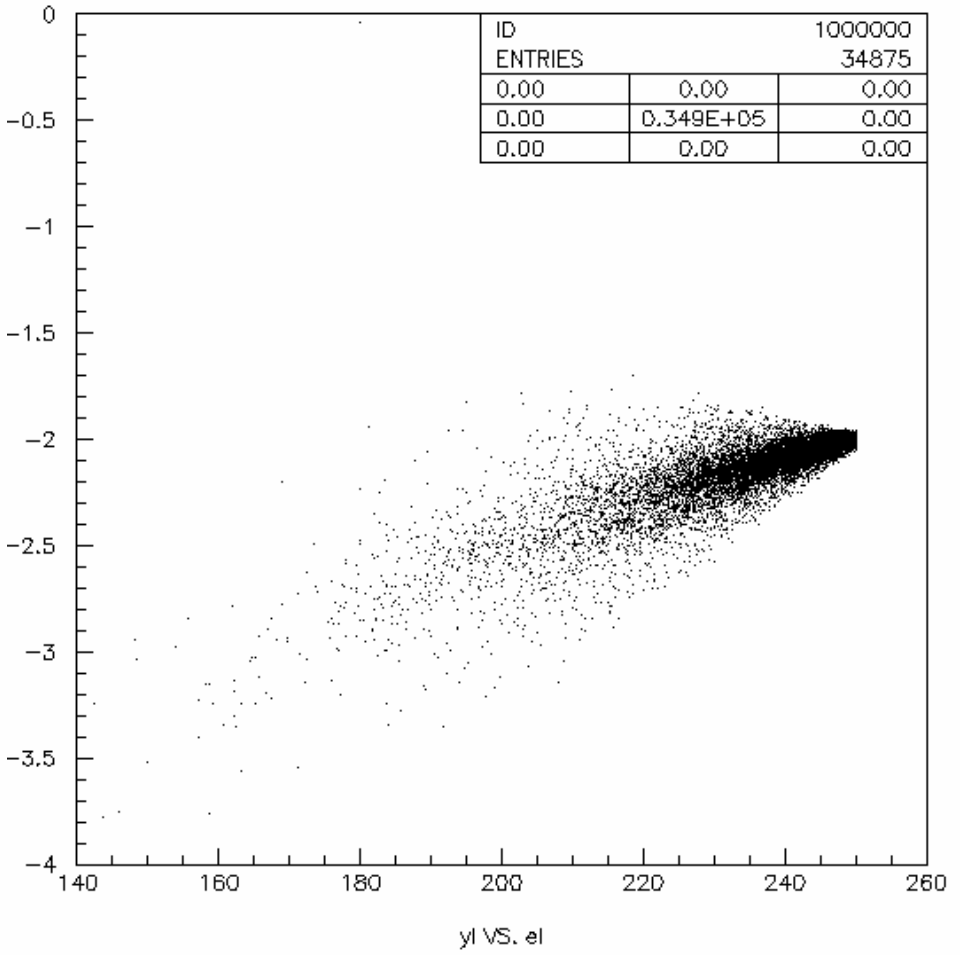


20 mrad crossing angle

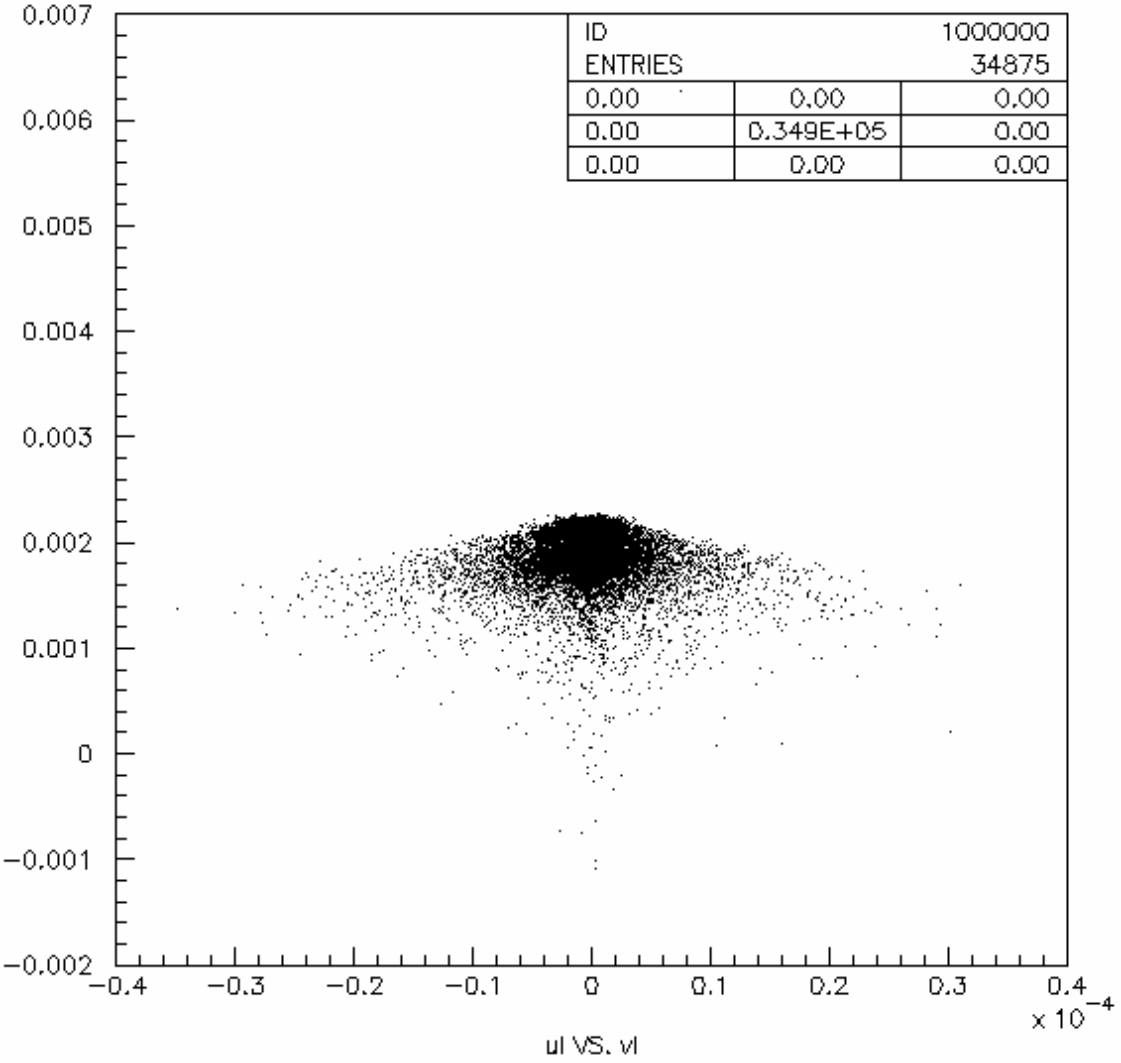


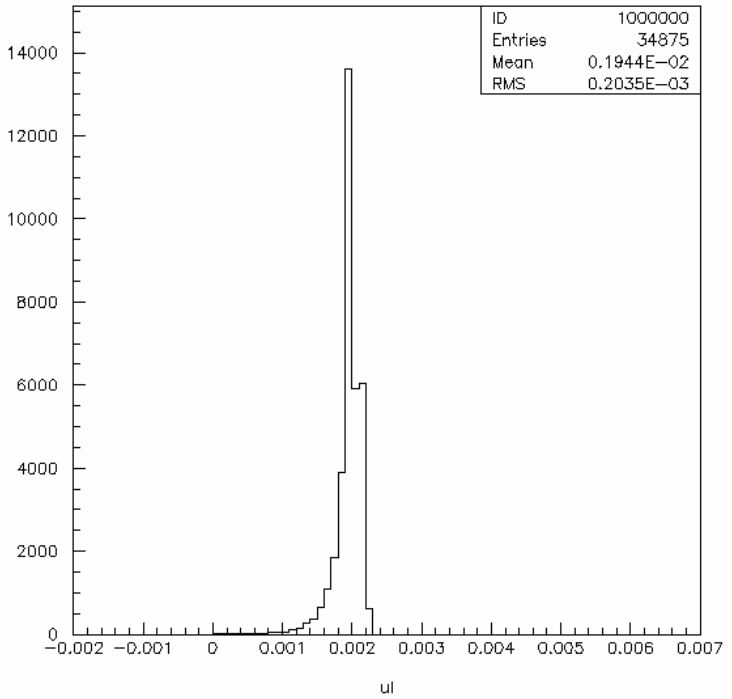
x and y vs Energy

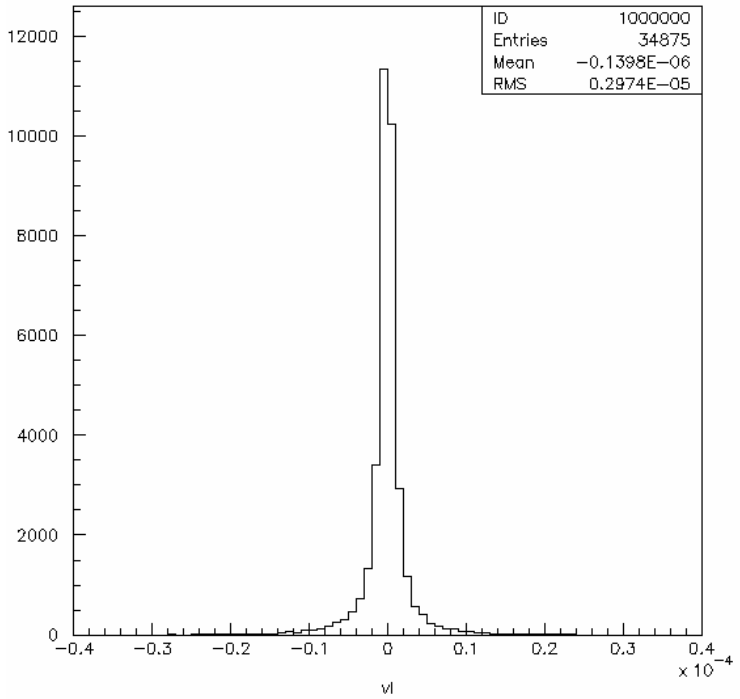




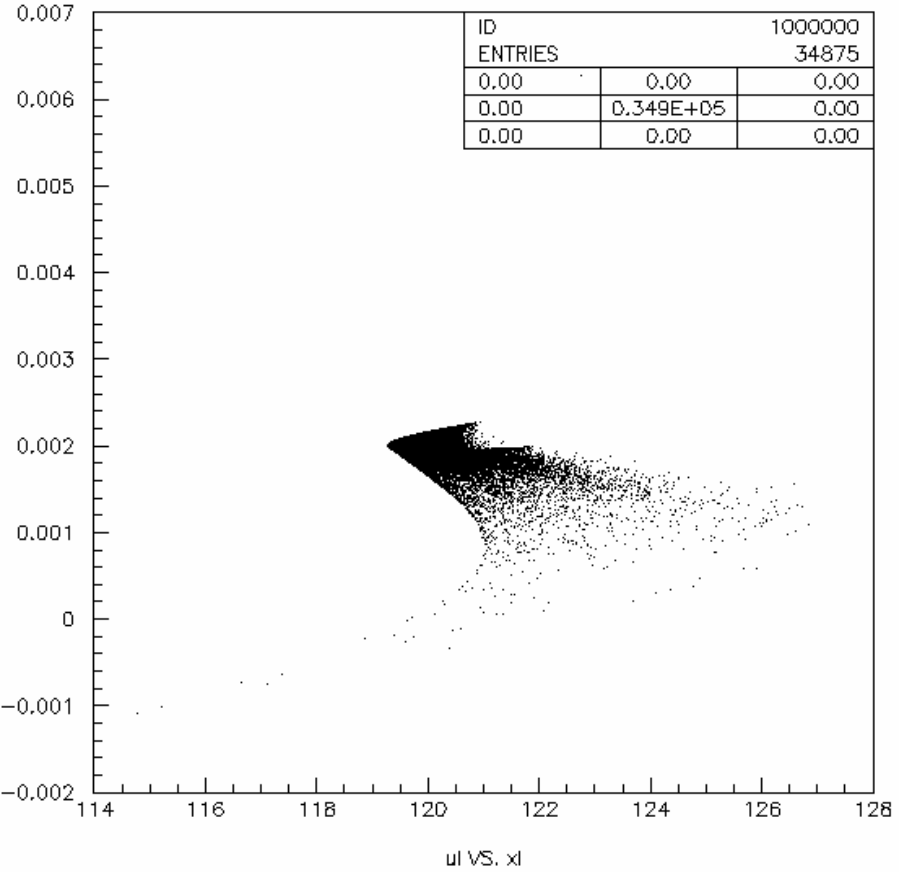
x-angle and y-angle



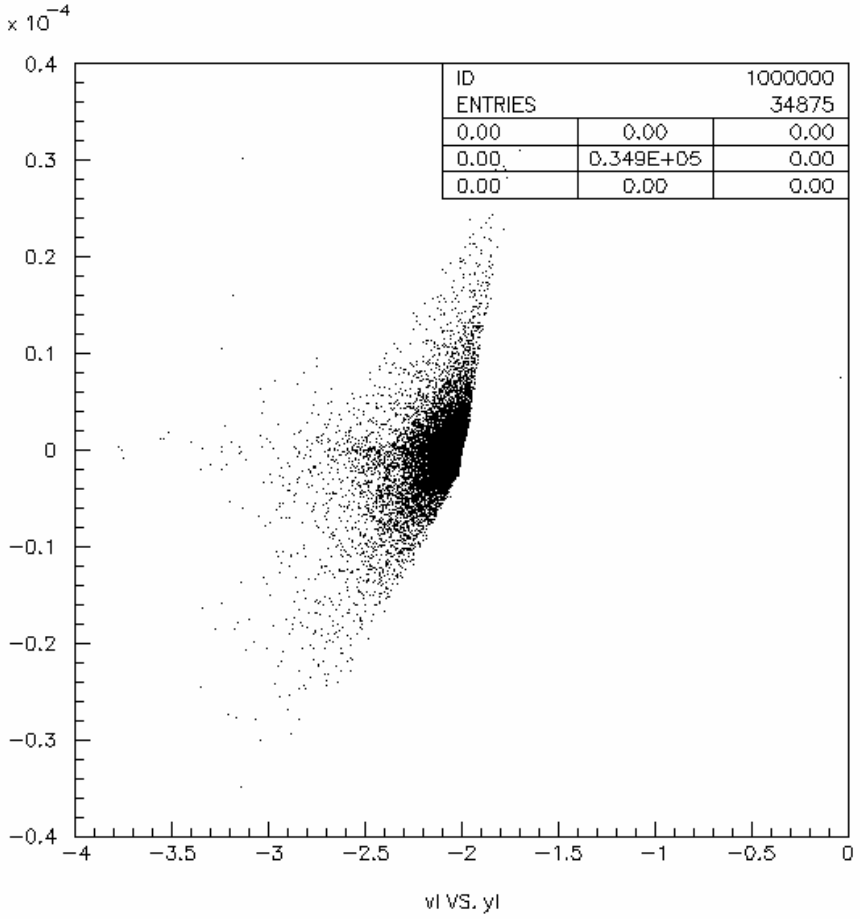




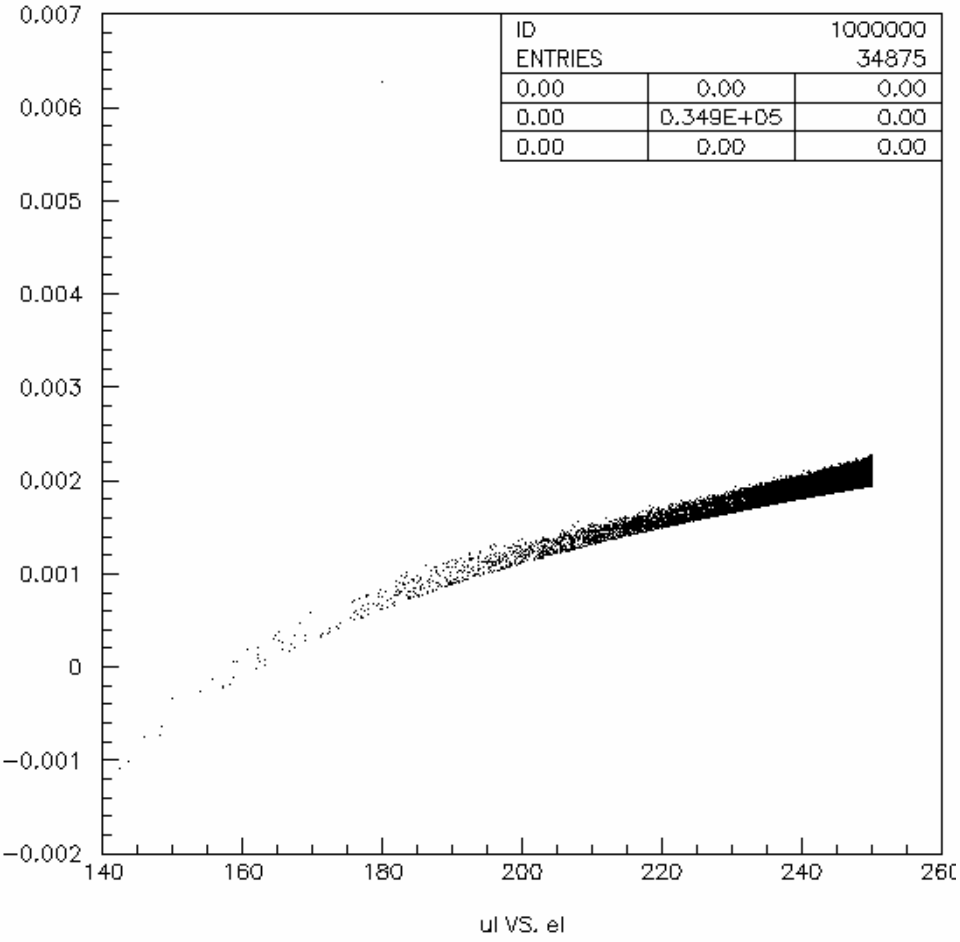
x-angle vs x

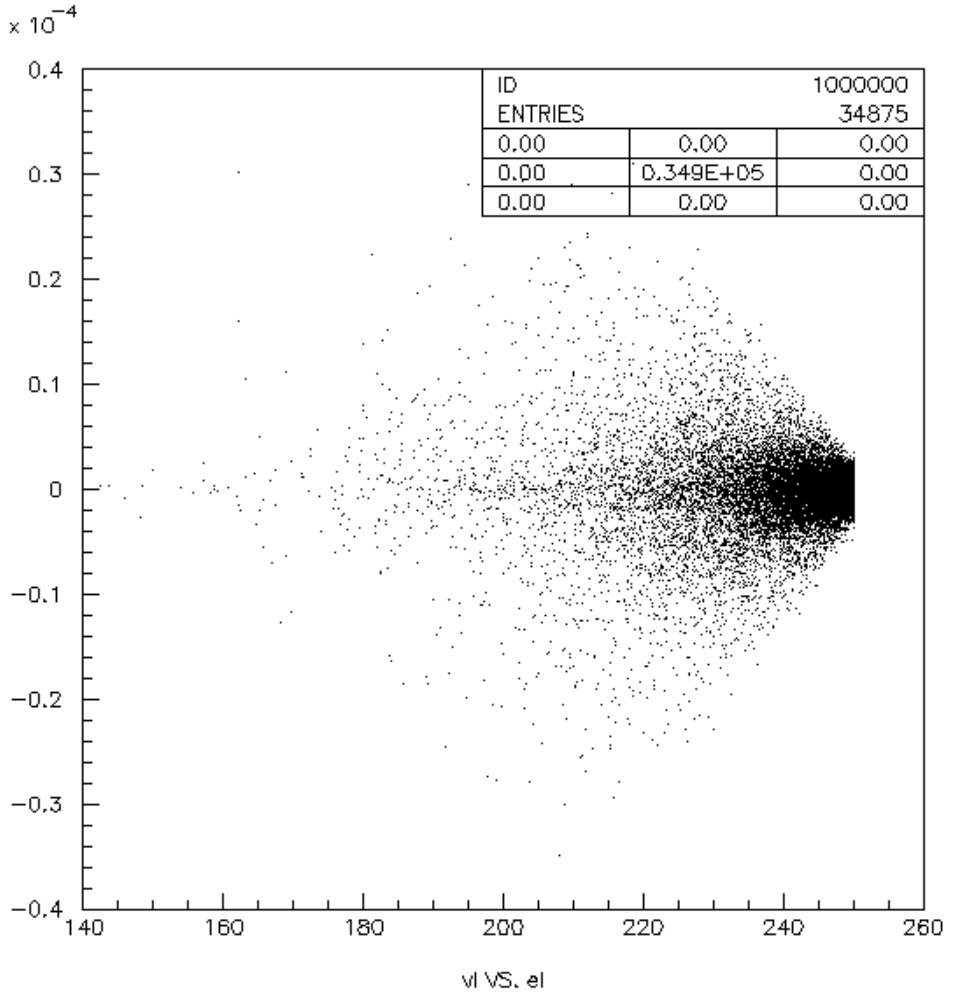


y-angle vs y



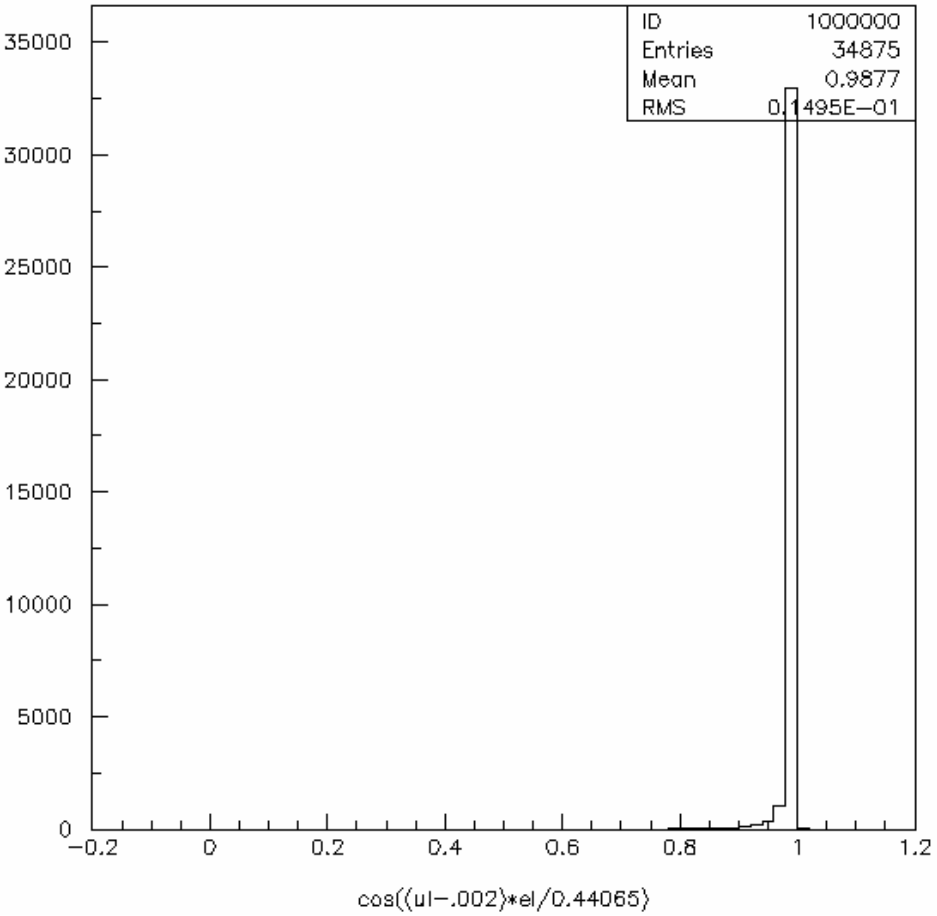
Angles vs energy

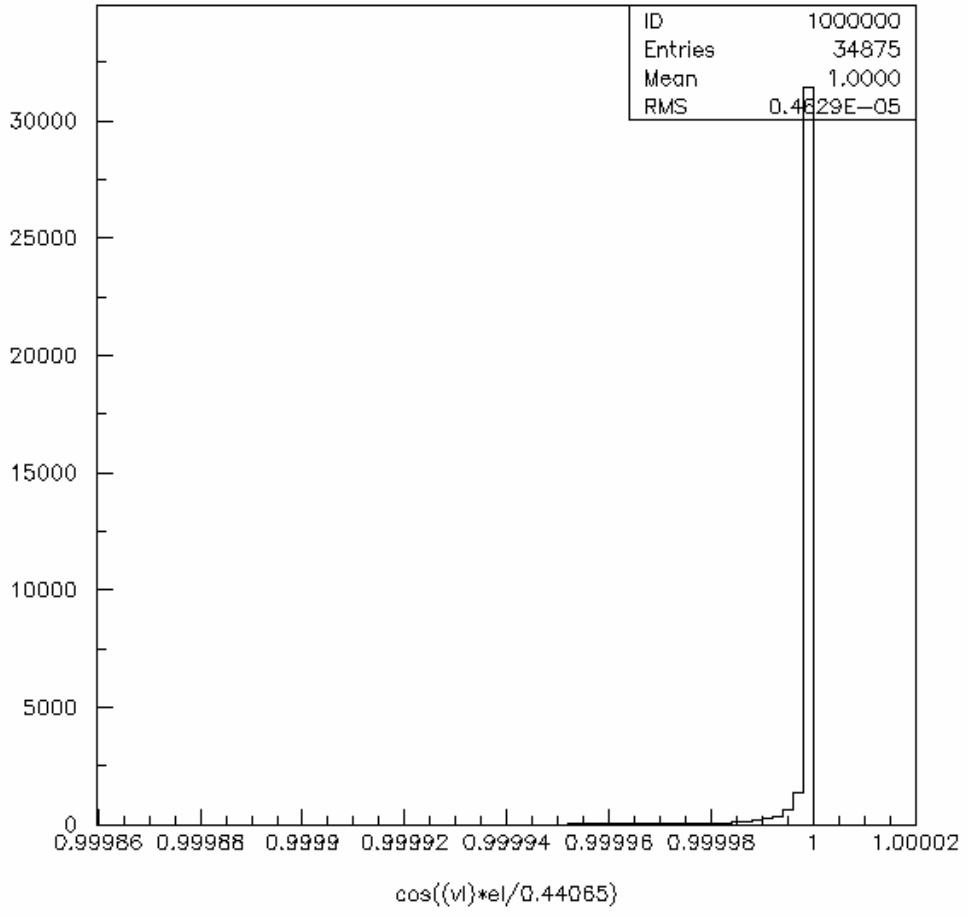




cos [(u-2mrad)E/0.44065] and cos(v E/0.44065)

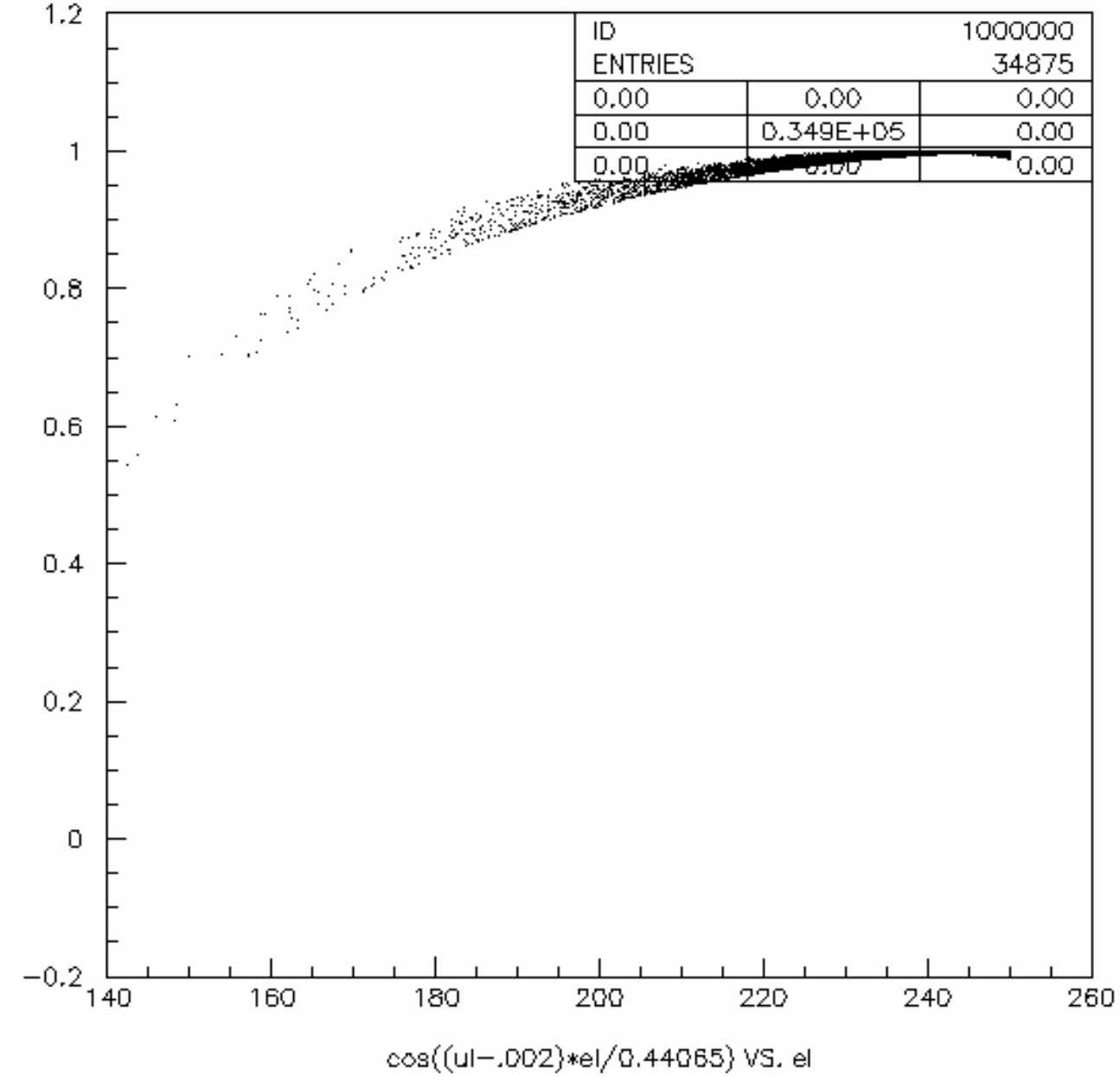
With all the disrupted beam included there is only a 1.23% depolarization!



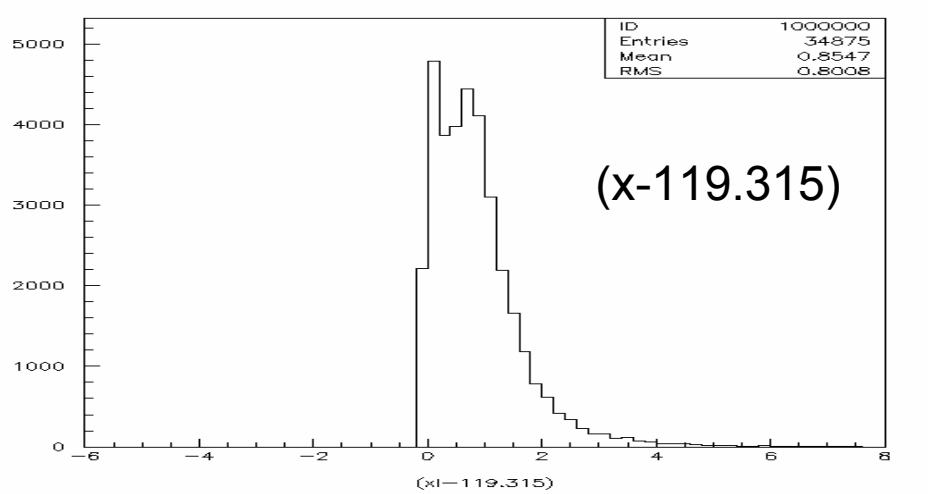


cos[(u-0.002)*E/0.44065] versus E

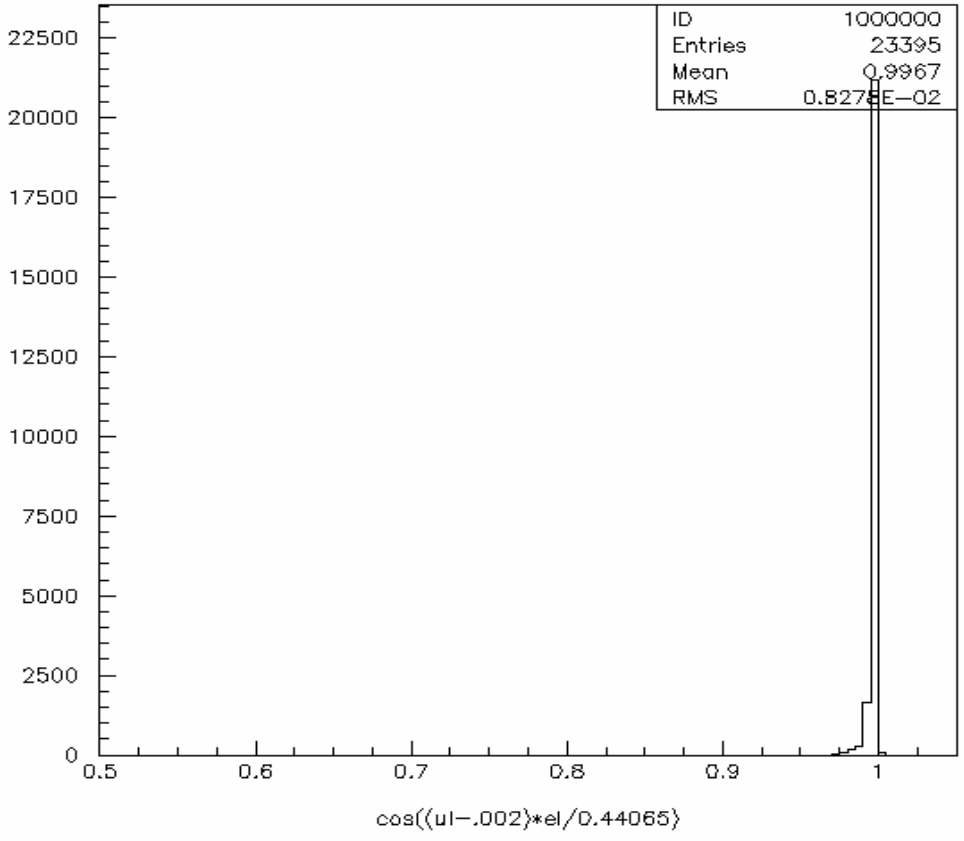
Note the low energy tail has large spin diffusion



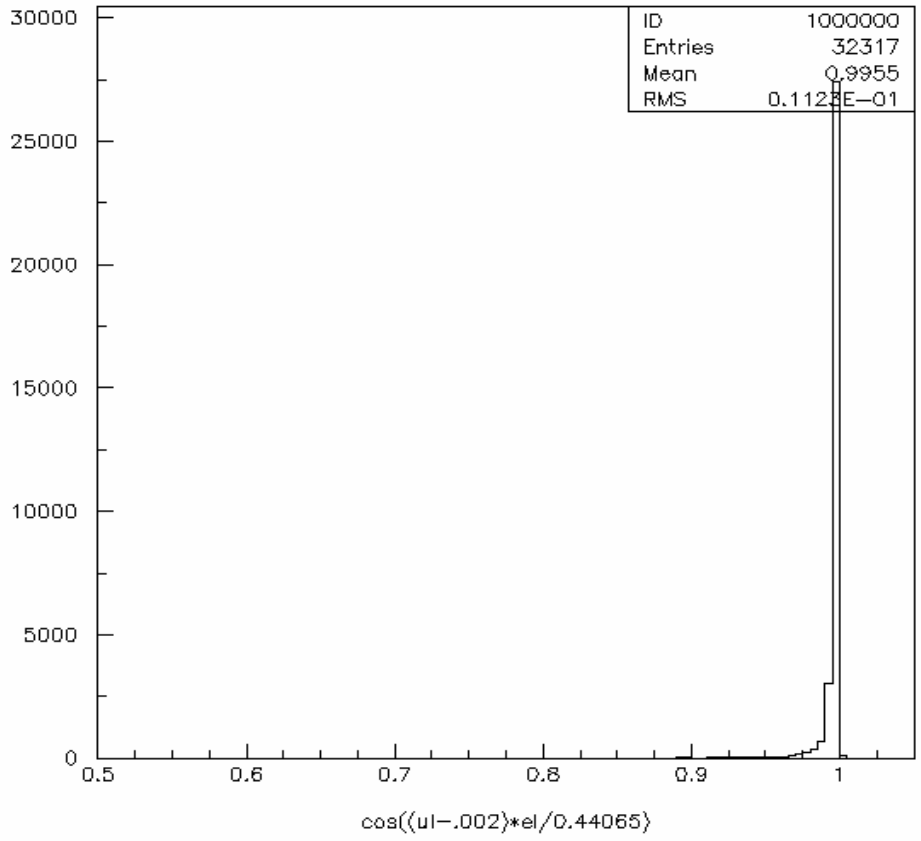
cos[(u-0.002)*E/0.44065]
with x cut



For (x-119.315)<1cm



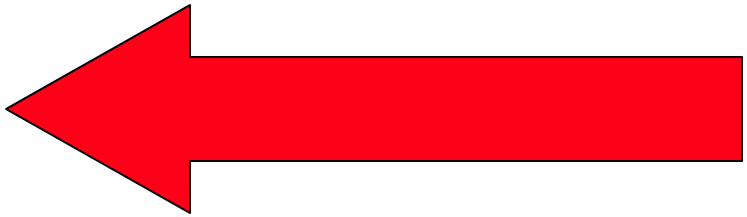
For (x-119.315)<2cm

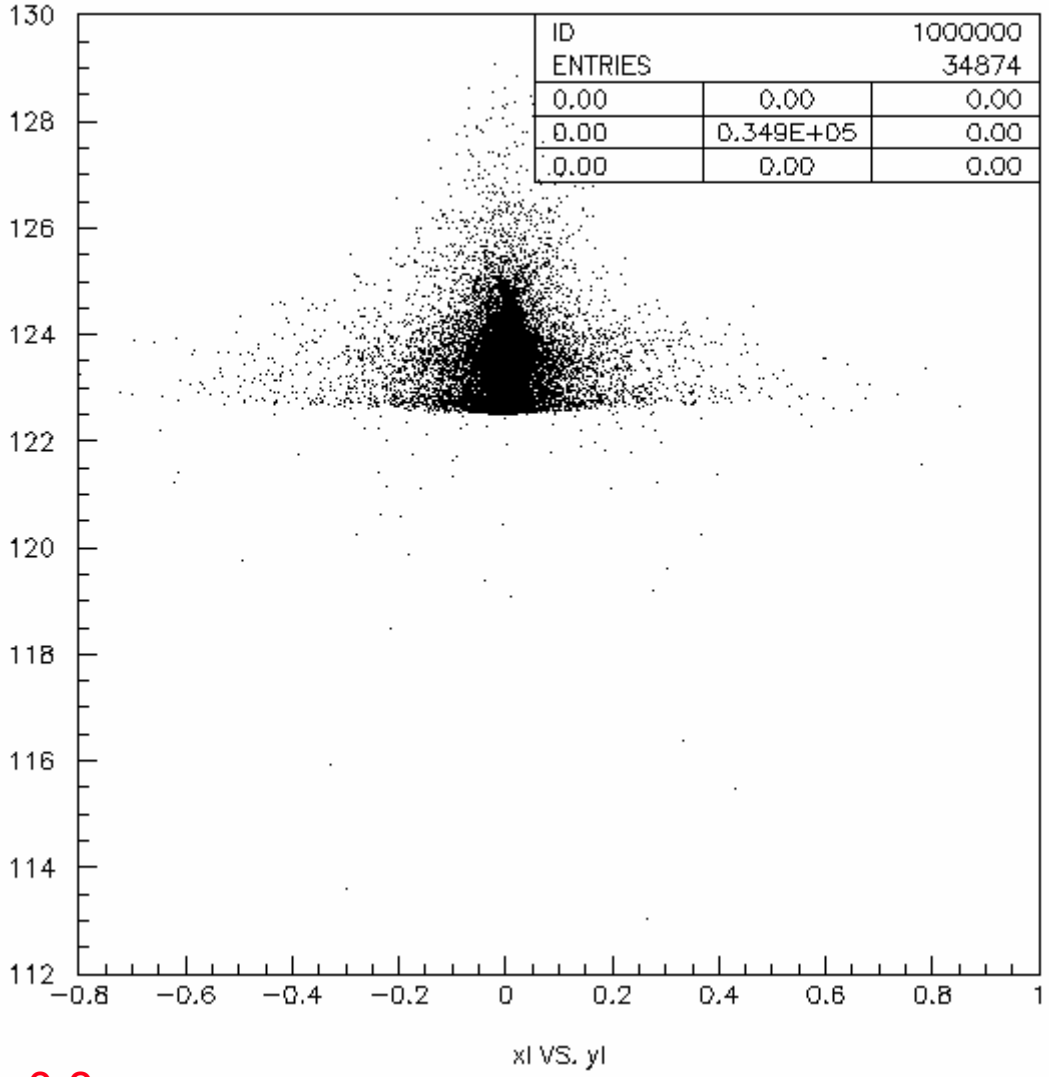


Distributions at Compton Detector Plane: z=243.00 m

1 beam track lost between Compton IP and Compton detector plane

First Cell of Compton Detector starts
-10cm





-0.8 cm