

# Pad Response Function

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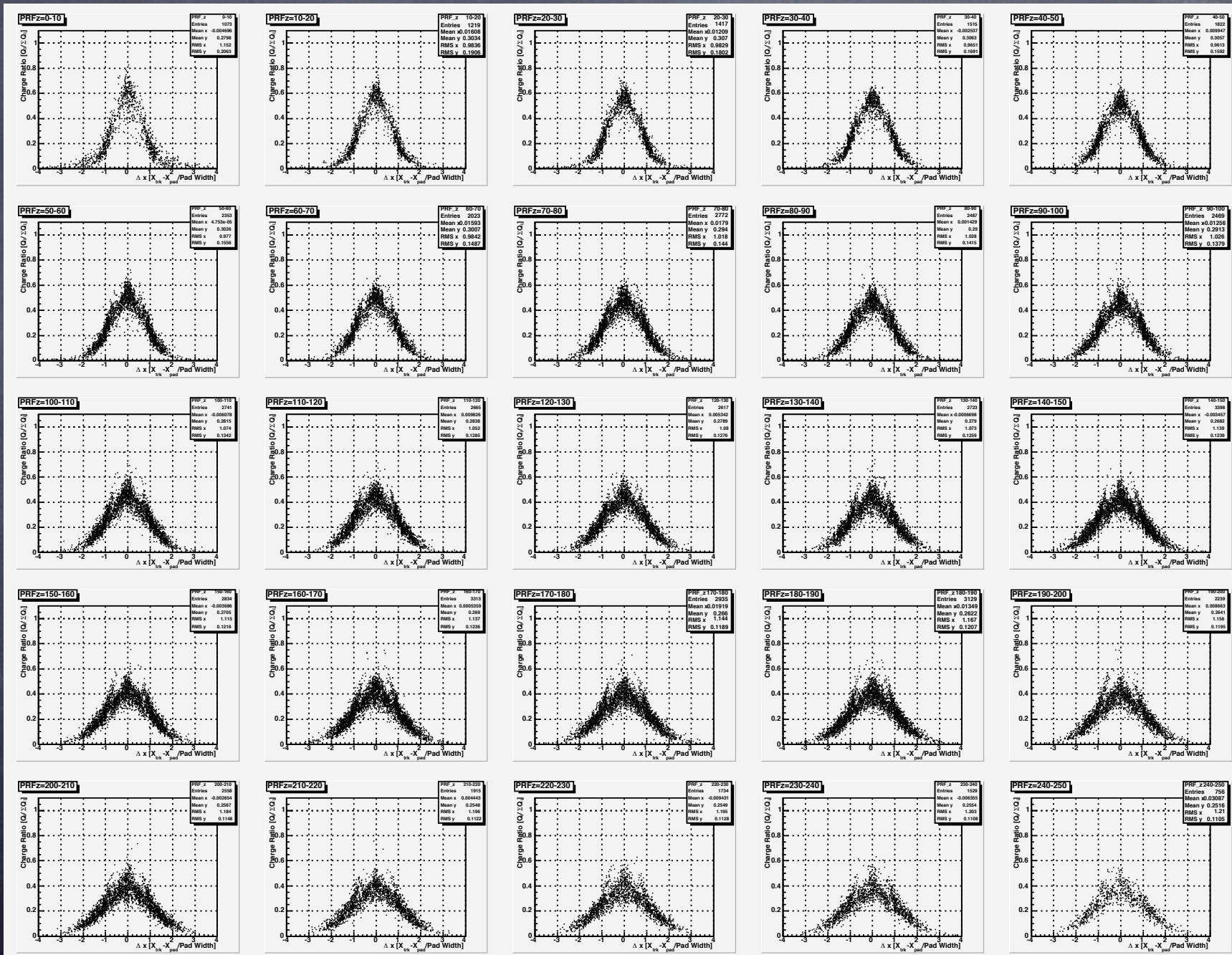
2004/08/27

# Method

- Select track – associated hit points with 3 or more pads hit
- Plot  $Q_i/Q_{tot}$  against  $(X_{track} - X_{padi})/w$  for different Z bins ( $w=2.2\text{mm}$ )
- Divide the plot into different X-slices and fit each slice with a gaussian
- Plot the sigma as a function of Z

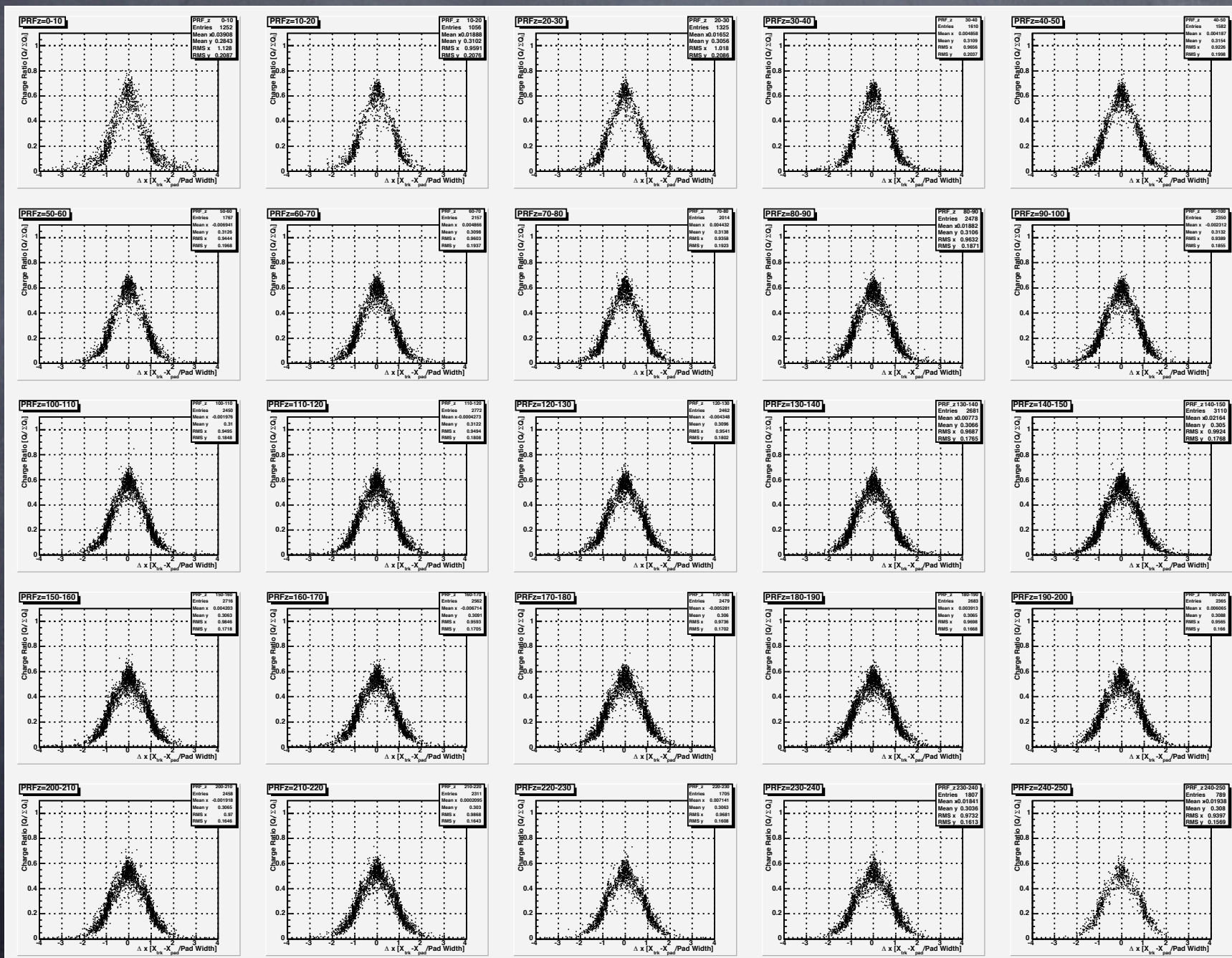
# B=0T Results

Z-bins: 0-1, 1-2, 2-3, ..., 23-24, 24-25cm

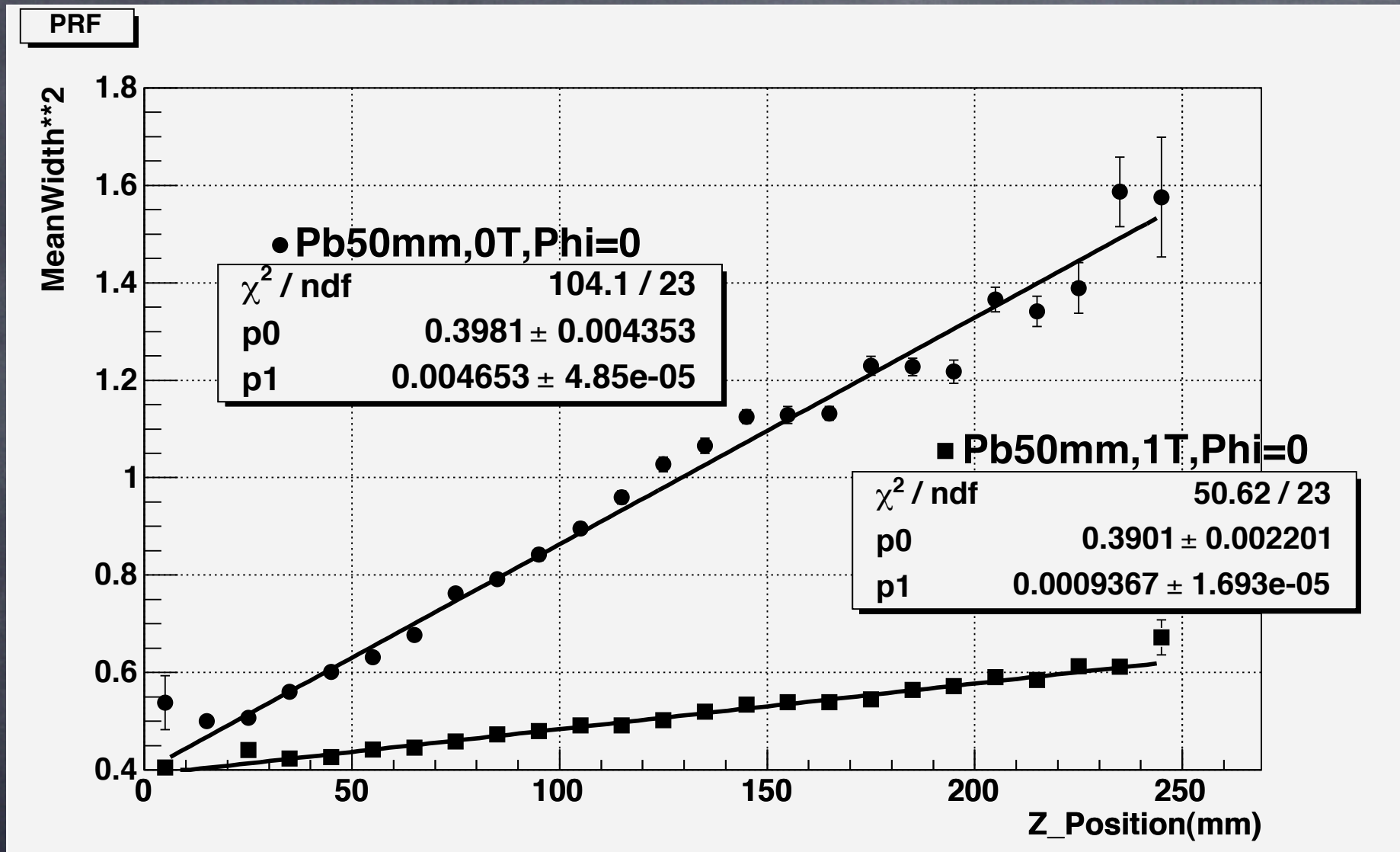


# B=1T Results

Z-bins: 0-1,1-2,2-3, ..., ,23-24,24-25cm

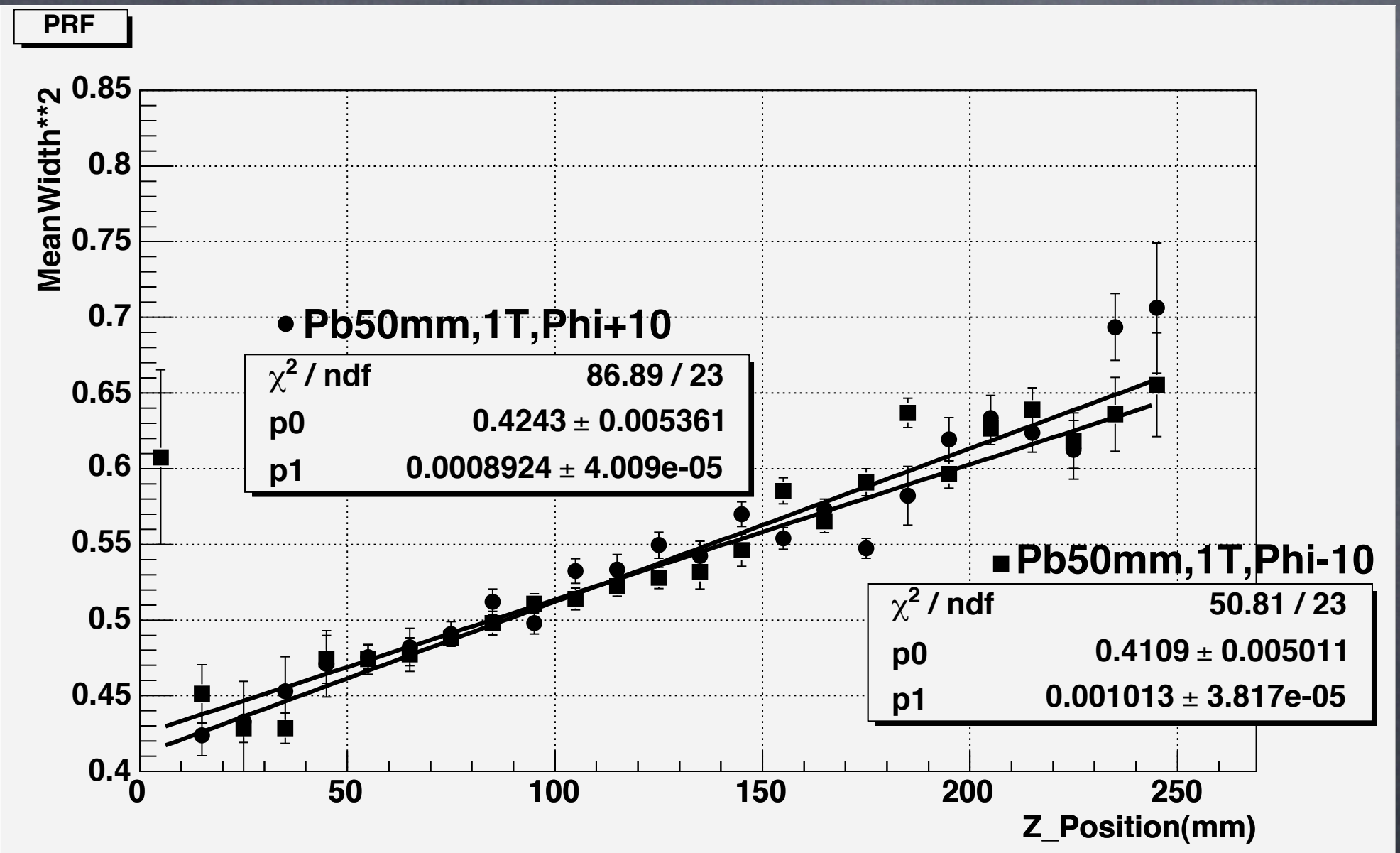


# Summary ( $\phi=0$ )



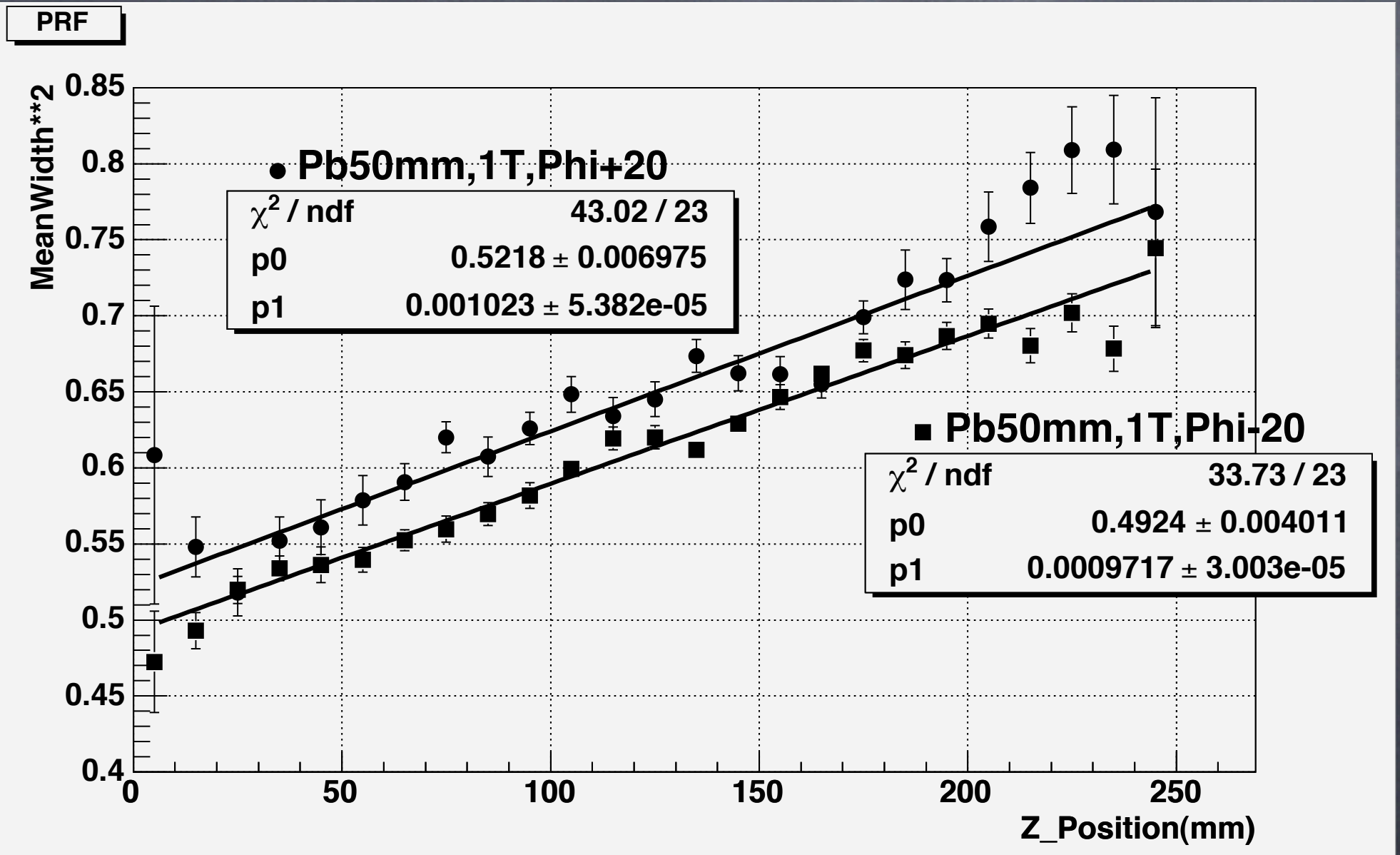
- B=0 & B=1T lines seem to meet at a single point for Z=0 which corresponds to PRF width of 1.4 mm

# Wire Angular Effect



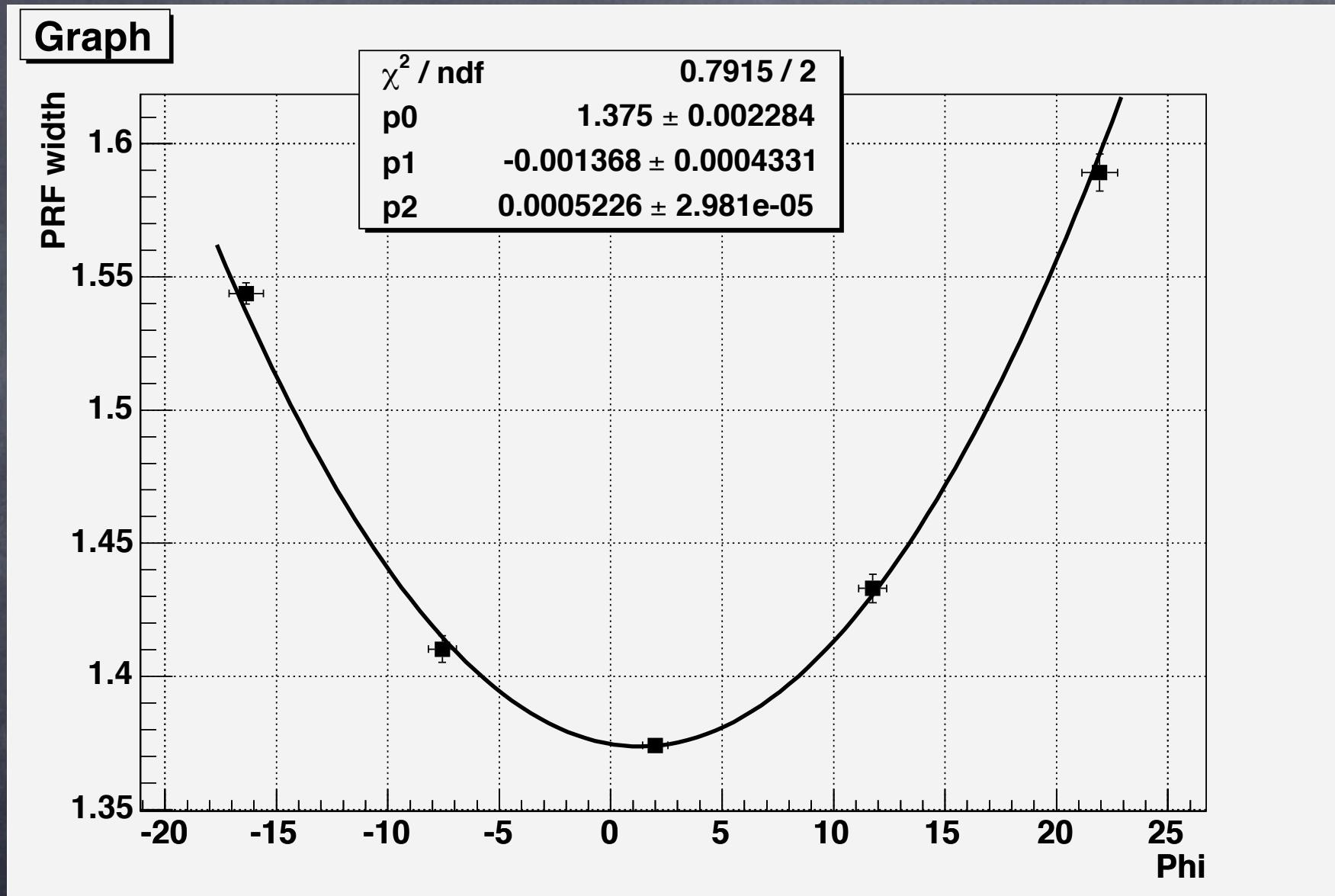
● There is no significant difference between Phi=+10 & Phi=-10 lines

# continued



- Phi=+20 line corresponds to PRF width of 1.6 mm, while Phi=-20 line corresponds to PRF width of 1.55 mm

# Summary(Phi vs PRF width)



- Minimum at a slightly negative phi angle  
--->wire angular effect