

Figure 1: pmiss vs  $\cos(\theta_e)$  for run1 bismuth, kin04, r1360

There is something anomalous about the bismuth run2 results. This shows up in the pmiss spectra and in  $\cos(\theta_e)$  vs pmiss. For kinematics 4, 200MeV/c, the pmiss spectra should be at this value(200 MeV/c) of pmiss. I looked at Bjorken x and  $\theta_{pq}$  for these runs and they are reasonable compared to each other. Is it possible that the analyzer reads the angles from the tools screen to calculate the kinematic values? These are put in by hand. Or does the analyzer get hardwired values for theta? As far as I remember we set the spectrometer angles using a tv monitor and input values into the tools screen by hand from the tv monitor.

The 2d plots in figure 1, figure 2 show an unexpected curvature to the plot for run2. The projection onto the pmiss axis is shown in figure 3.

However, for the lead runs, kin02, figure 4 and kin08, figure 5 the pmiss vs  $\cos(\theta_e)$  plots look normal. I conclude that the angle setting for the spectrometers was incorrect, most likely the RHRS since this one had to be changed.

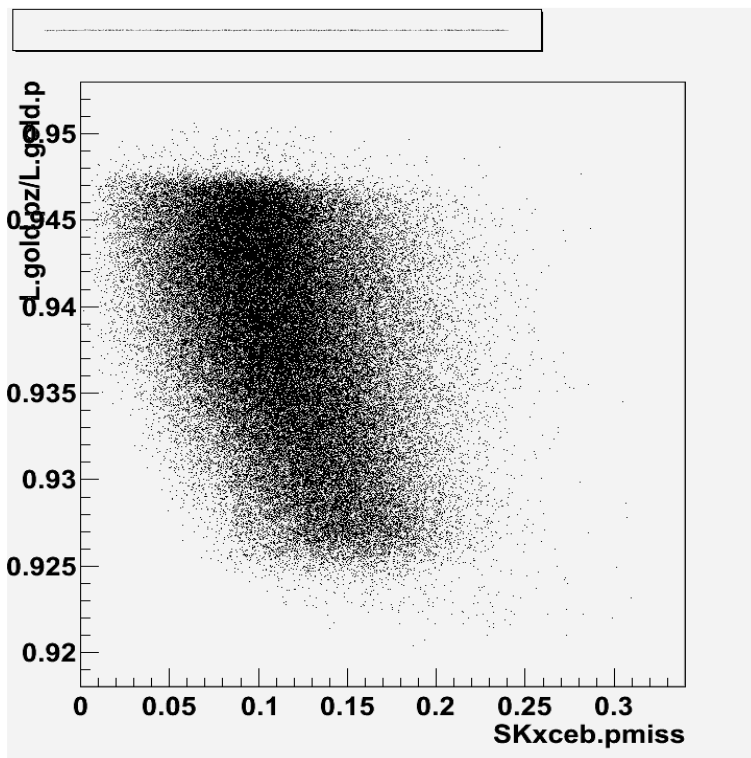


Figure 2:  $p_{miss}$  vs  $\cos(\theta_e)$  for run2 bismuth, kin04, r3320

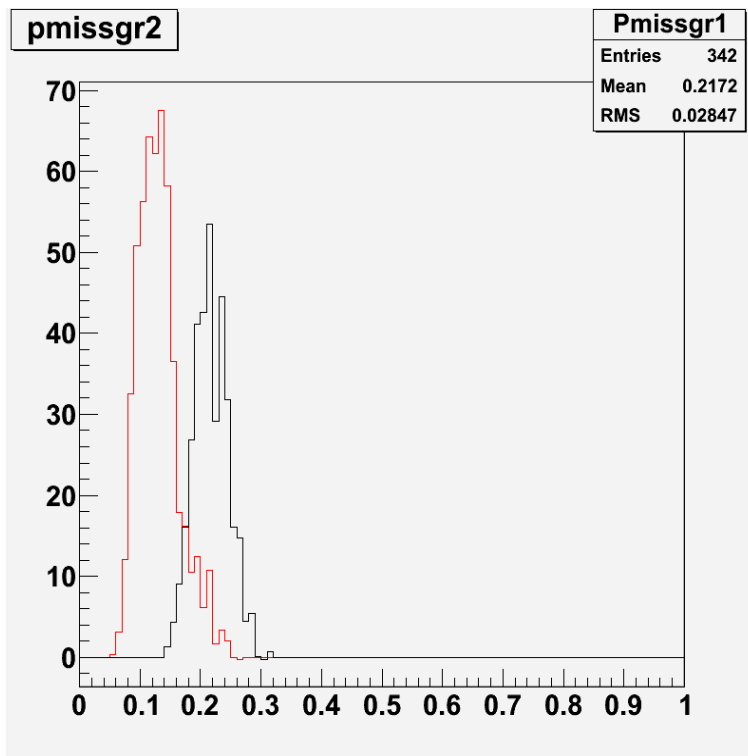


Figure 3: pmiss for kin04, bismuth: run1, r1360(black) and run2 r3320(red).

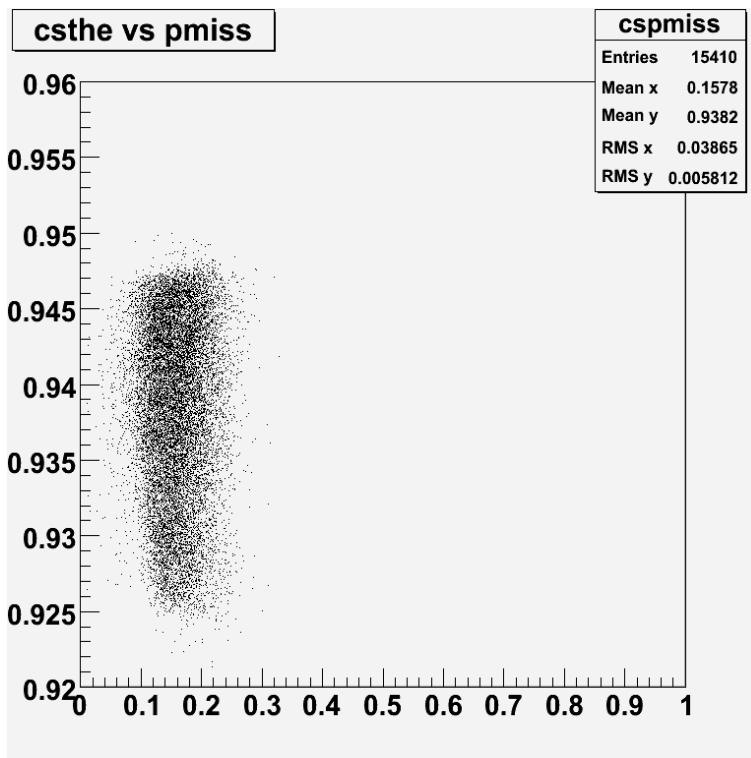


Figure 4:  $p_{\text{miss}}$  vs  $\cos(\theta_e)$  for run2 lead, kin02, r3120

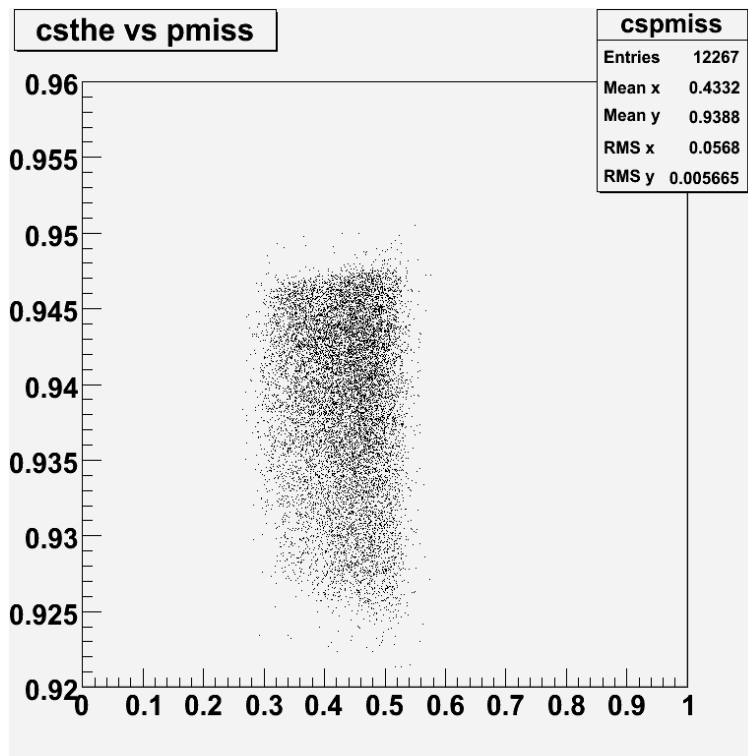


Figure 5:  $p_{miss}$  vs  $\cos(\theta_e)$  for run2 lead, kin08, r3351