Temperature dependence of the signals from PbW04 crystals

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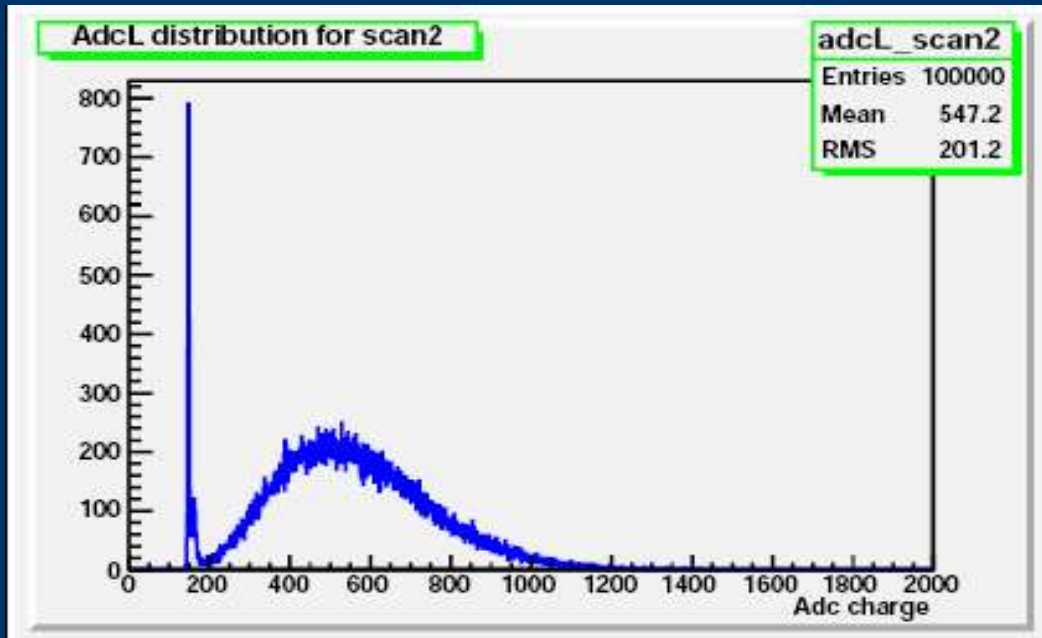
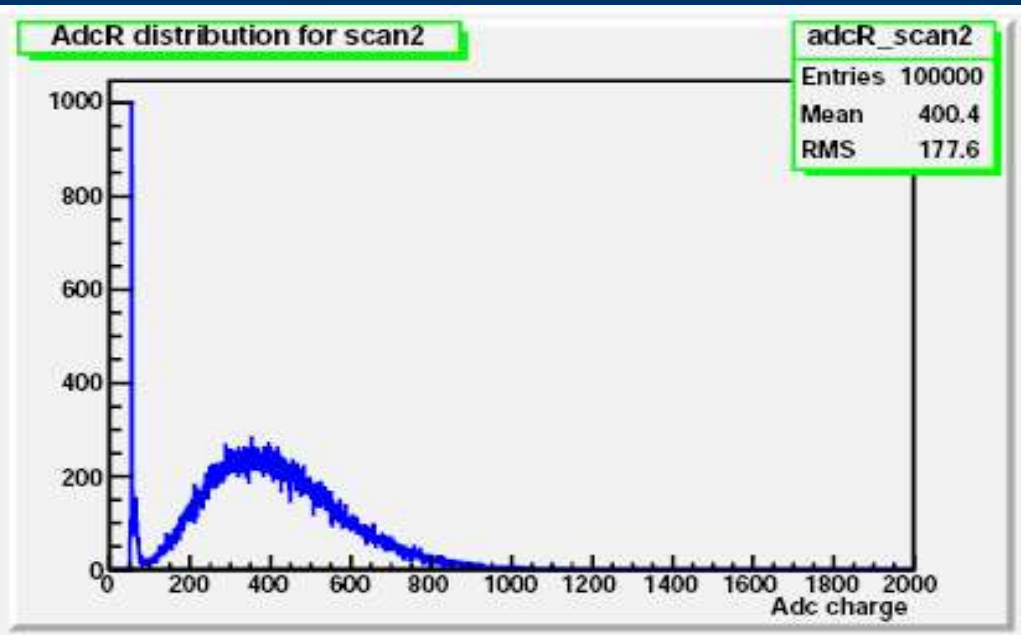
Temperature scans in single $PbWO_4$ crystal, 50 GeV electrons

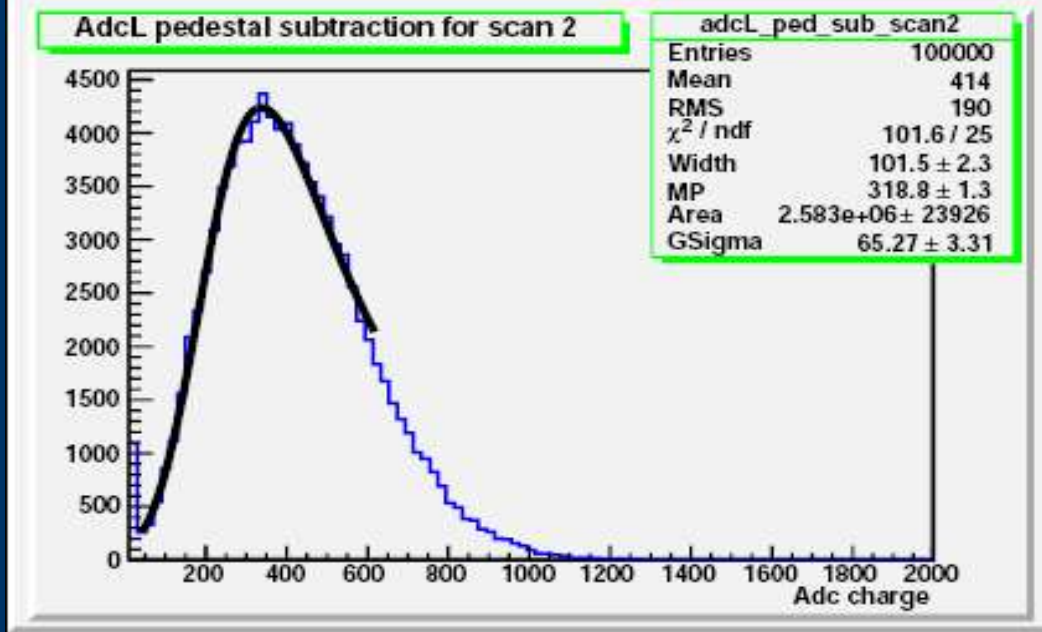
- 13 angular scan performed at different temperatures
- Each angular scan contains a different number of runs (7-30)
- Taken more than a scan at the same temperature

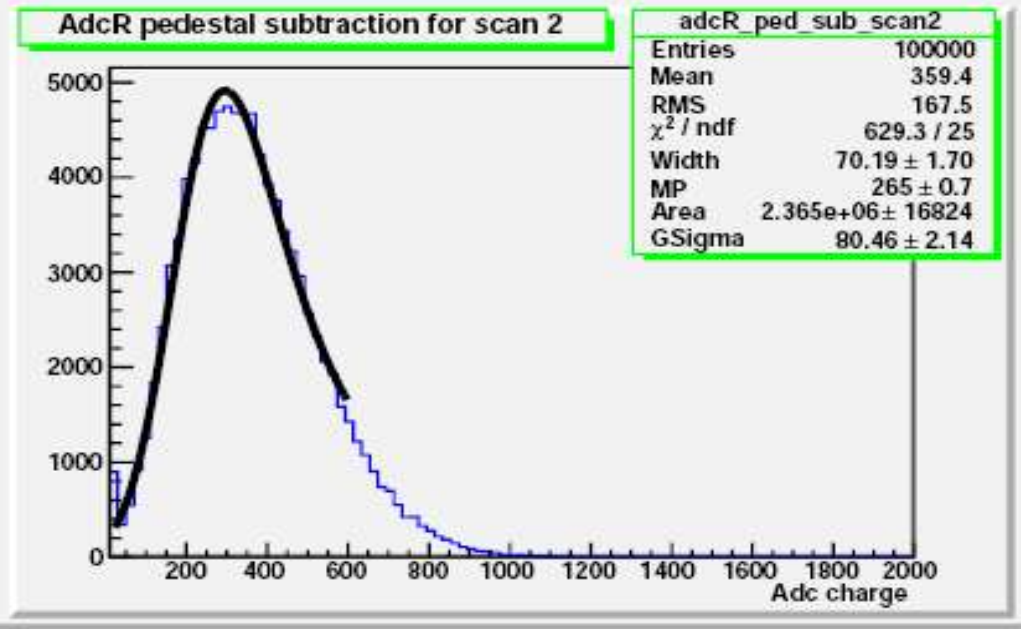
- *Temperature controlled measurements with crystal 2*
  Angular scans at different temperatures. Logbook pages 42-44, 46-61
  NB. No information from downstream beam chamber for runs 597-6
  - Runs 597 - 625, $T = 35°C$, $\theta = -60°$ to $+60°$
  - Runs 627 - 635, $T = 40°C$, $\theta = -35°$ to $+35°$
  - Runs 636 - 663, $T = 43°C$, $\theta = -60°$ to $+60°$
  - Runs 664 - 671, $T = 40°C$, $\theta = -35°$ to $+35°$
  - Runs 672 - 679, $T = 35°C$, $\theta = -35°$ to $+35°$
  - Runs 682 - 688, $T = 30°C$, $\theta = -35°$ to $+35°$
  - Runs 692 - 698, $T = 25°C$, $\theta = -35°$ to $+35°$
  - Runs 699 - 705, $T = 20°C$, $\theta = -35°$ to $+35°$
  - Runs 706 - 712, $T = 15°C$, $\theta = -35°$ to $+35°$
  - Runs 713 - 743, $T = 12°C$, $\theta = -60°$ to $+60°$
  - Runs 744 - 752, $T = 15°C$, $\theta = -35°$ to $+35°$
  - Runs 753 - 759, $T = 20°C$, $\theta = -35°$ to $+35°$
  - Runs 760 - 790, $T = 25°C$, $\theta = -60°$ to $+60°$

ADC Fit: convolution Gaus+Landau, only the peak, dynamic fit: [MaximumBin-130, MaximumBin+450] ADC counts

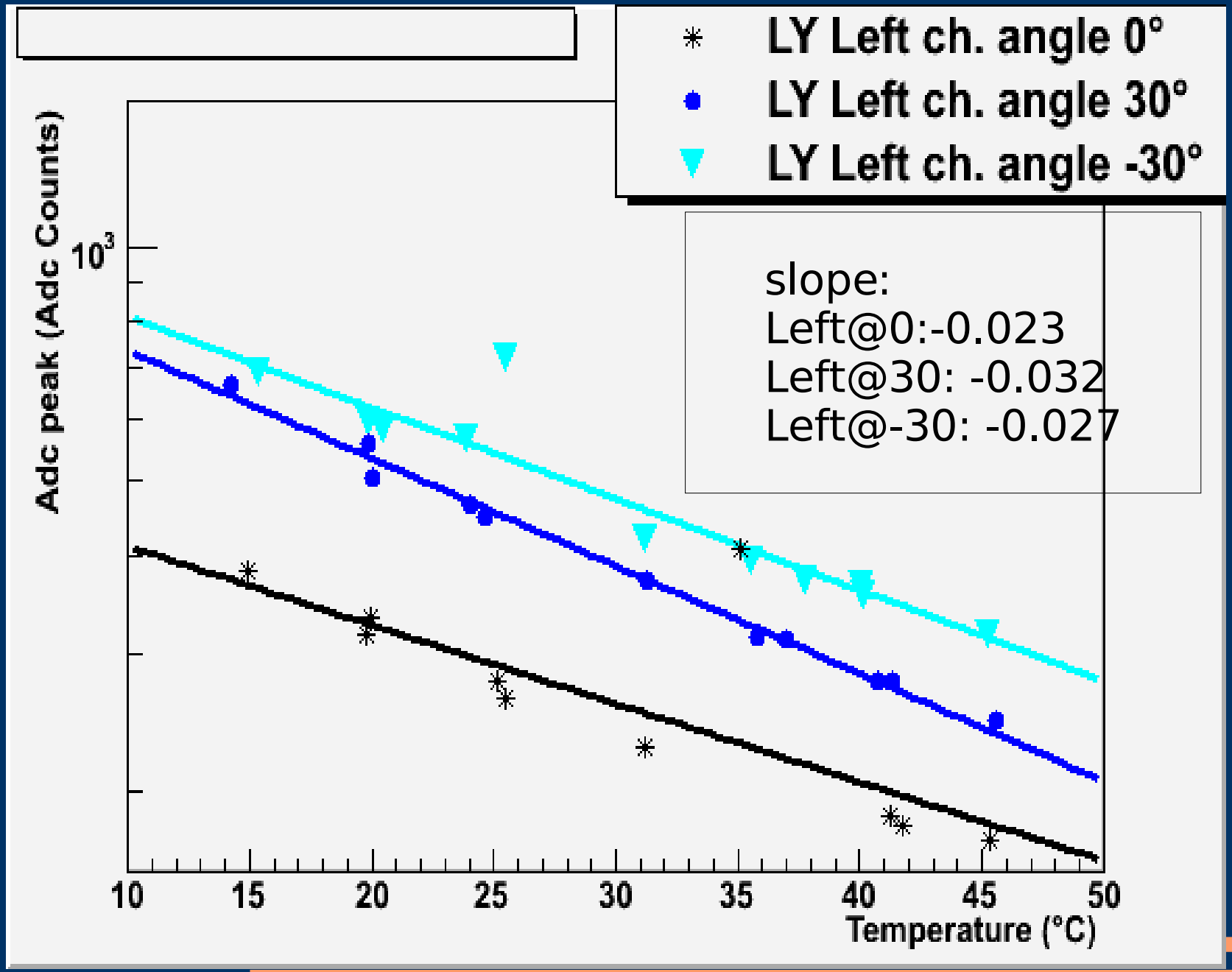




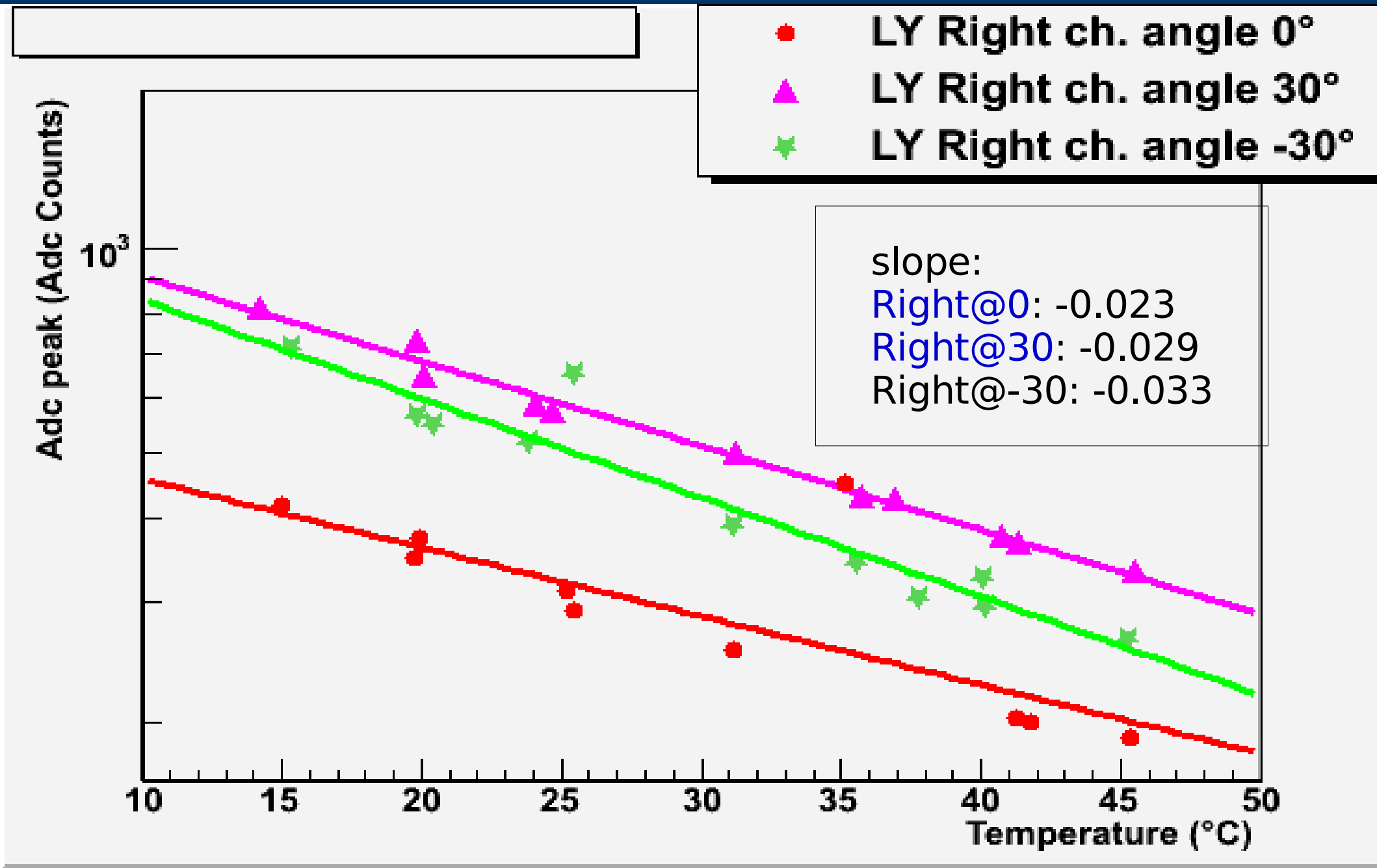




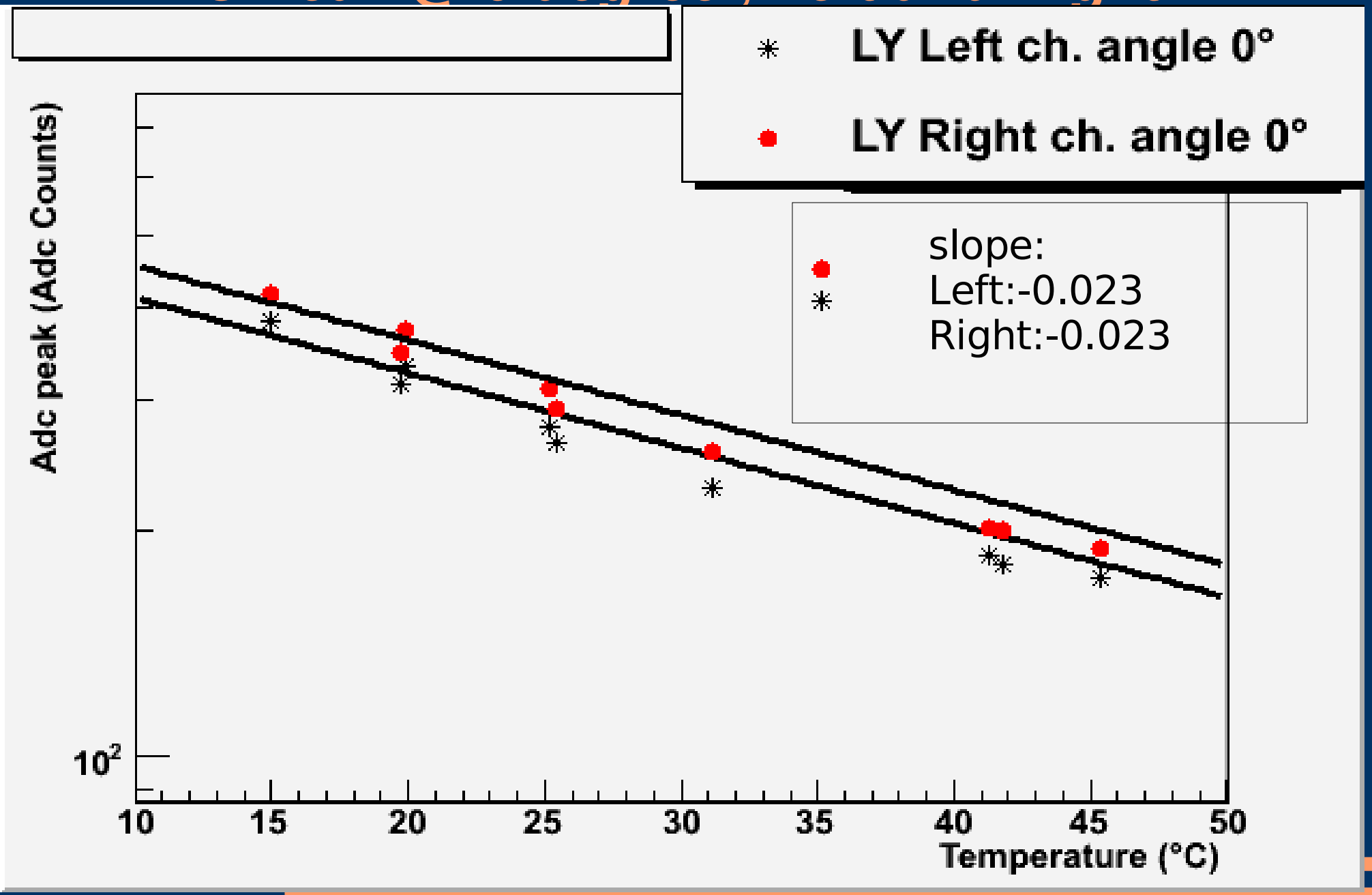
Left PM @ 30, 0, -30 degree



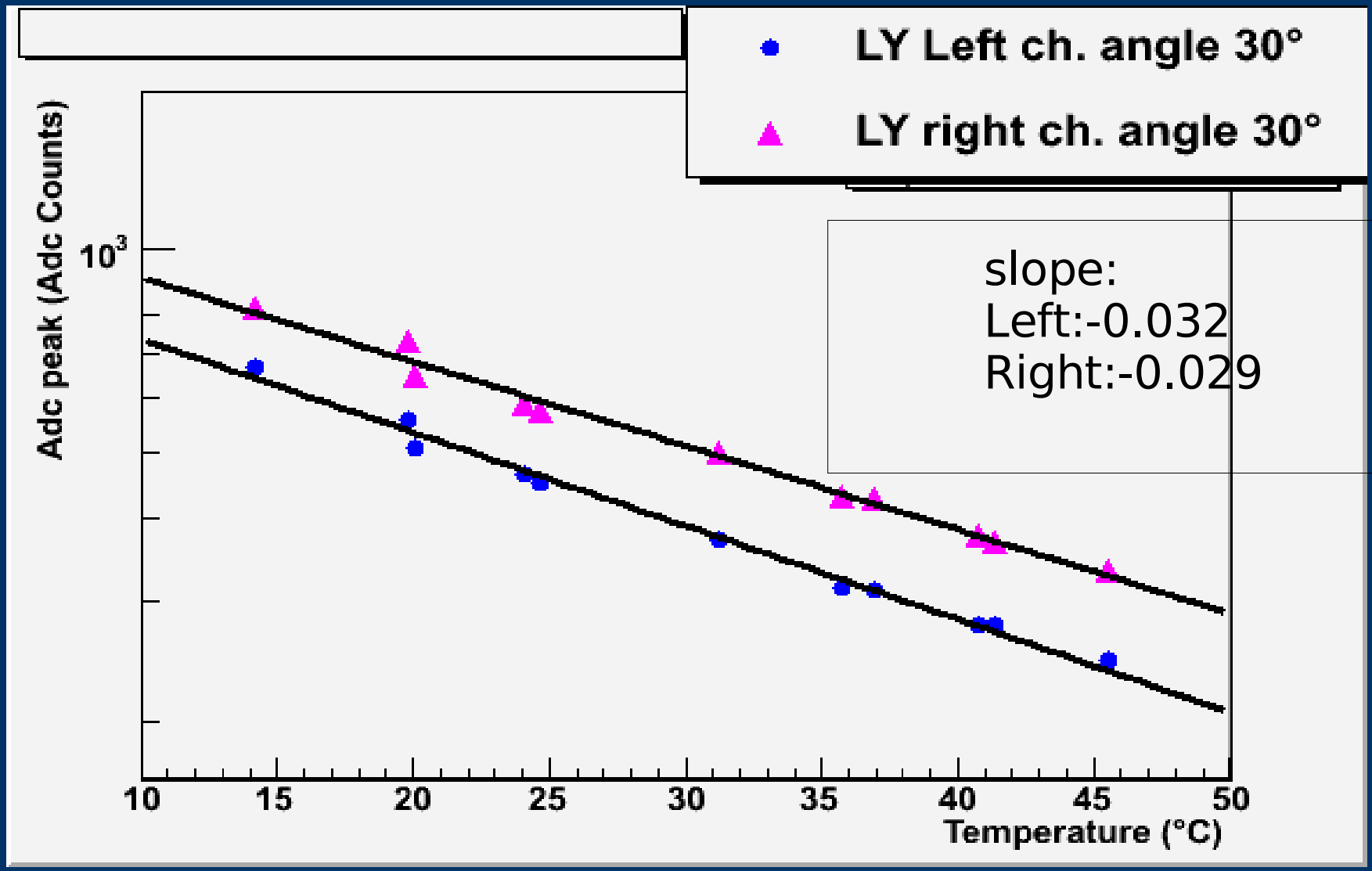
Right PM @ 30, 0, -30 degree



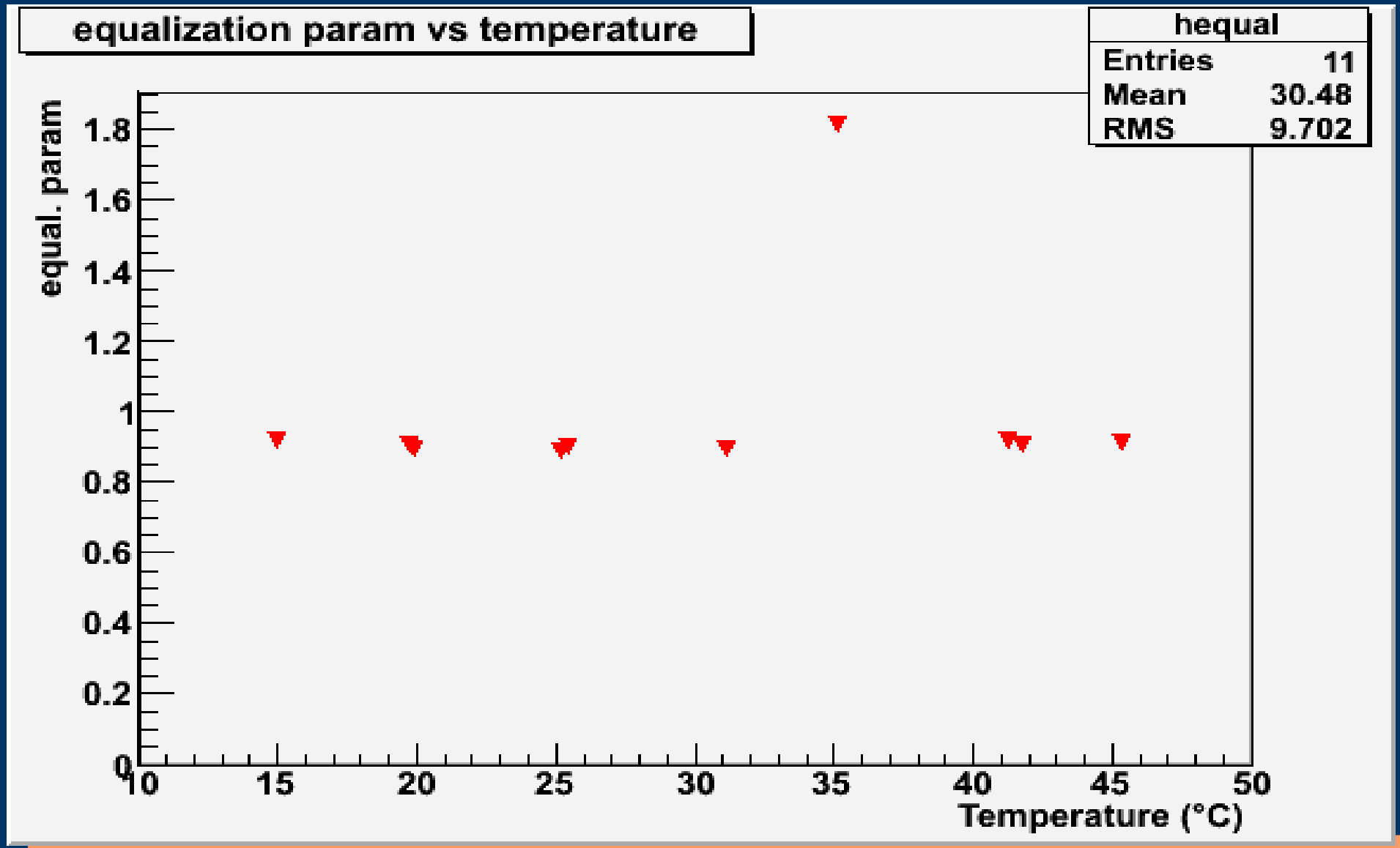
ADC Peak @ 0 degree , Left and Right PM



ADC Peak @ 30 degree , Left and Right PM

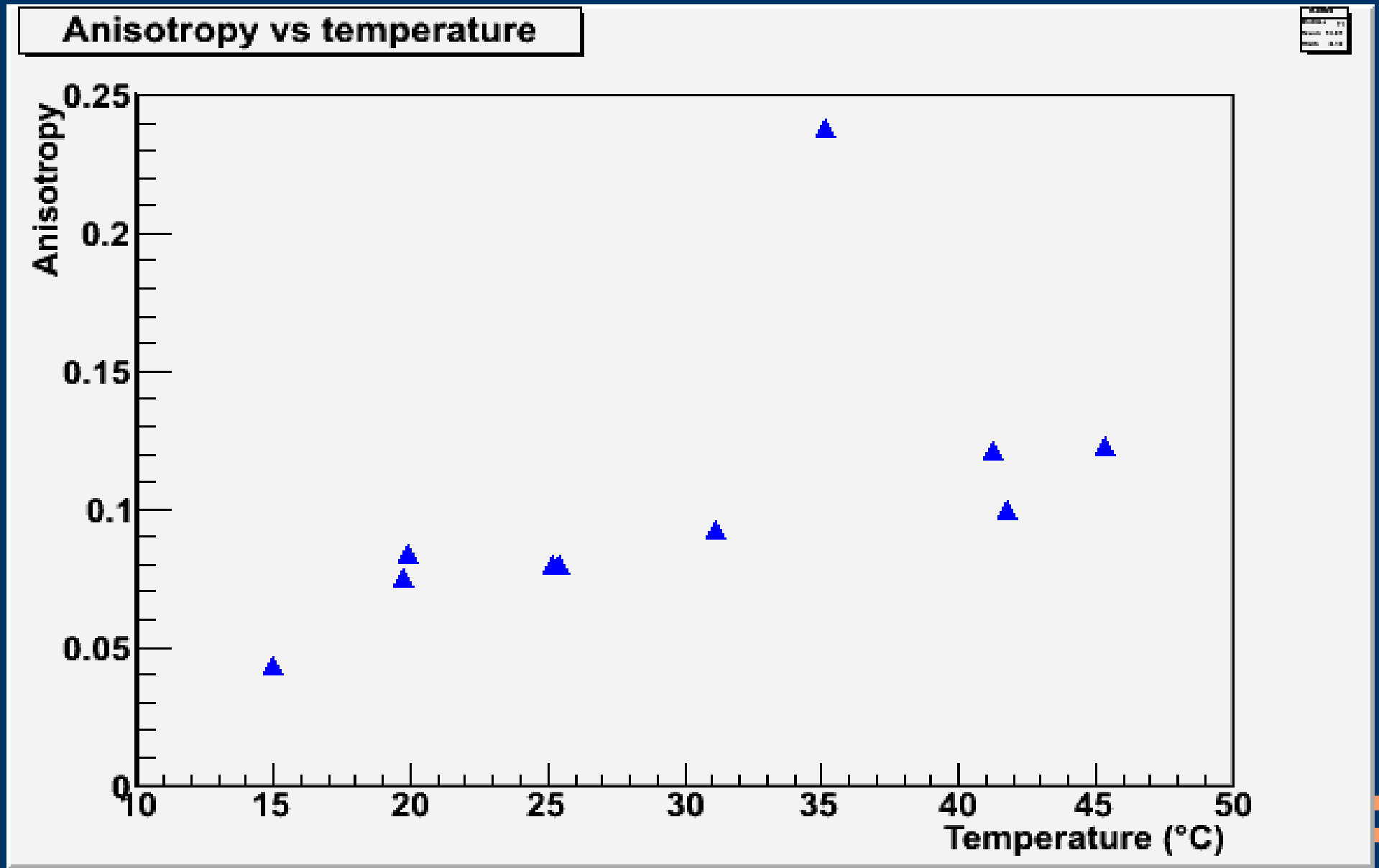


Equalization Coeff between PM_L & PM_R (peak ADC_L/peakADC_R)

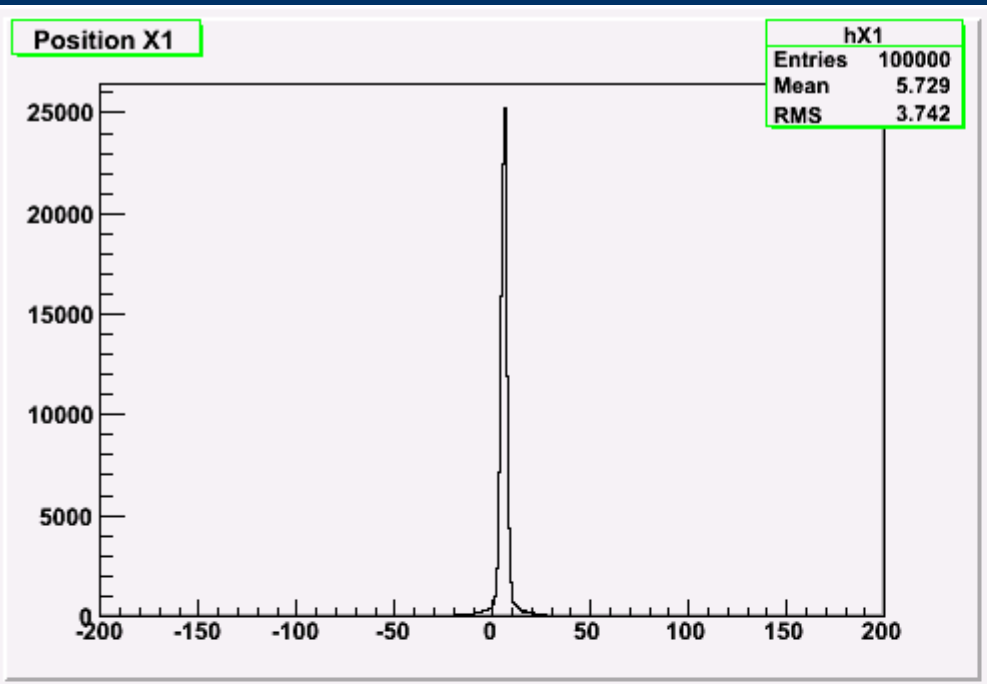


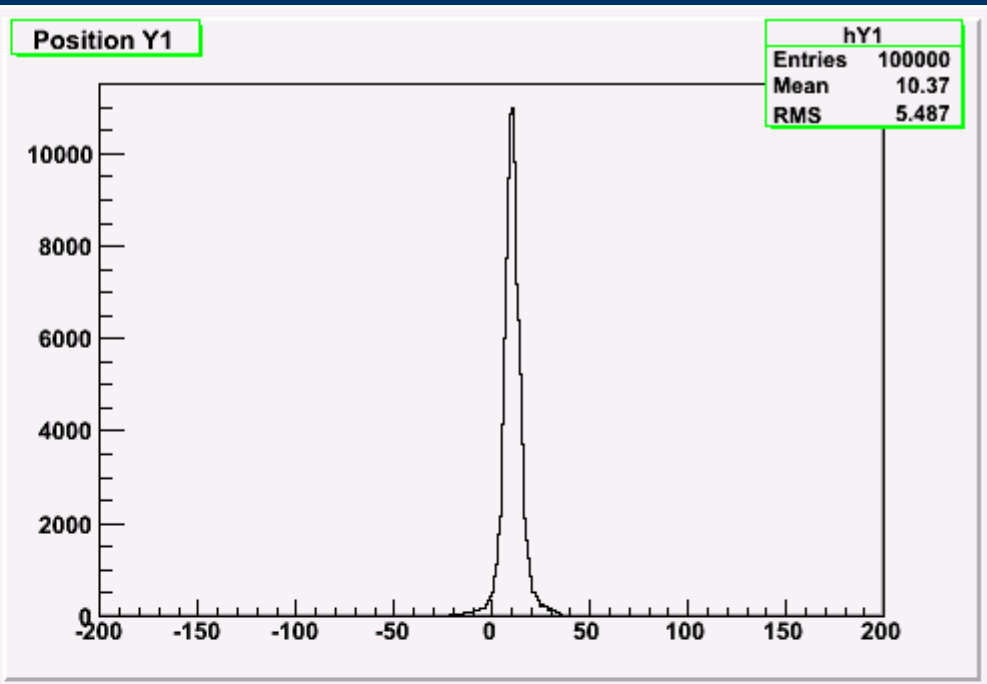
Anisotropy vs Temperature 30, -30 degrees

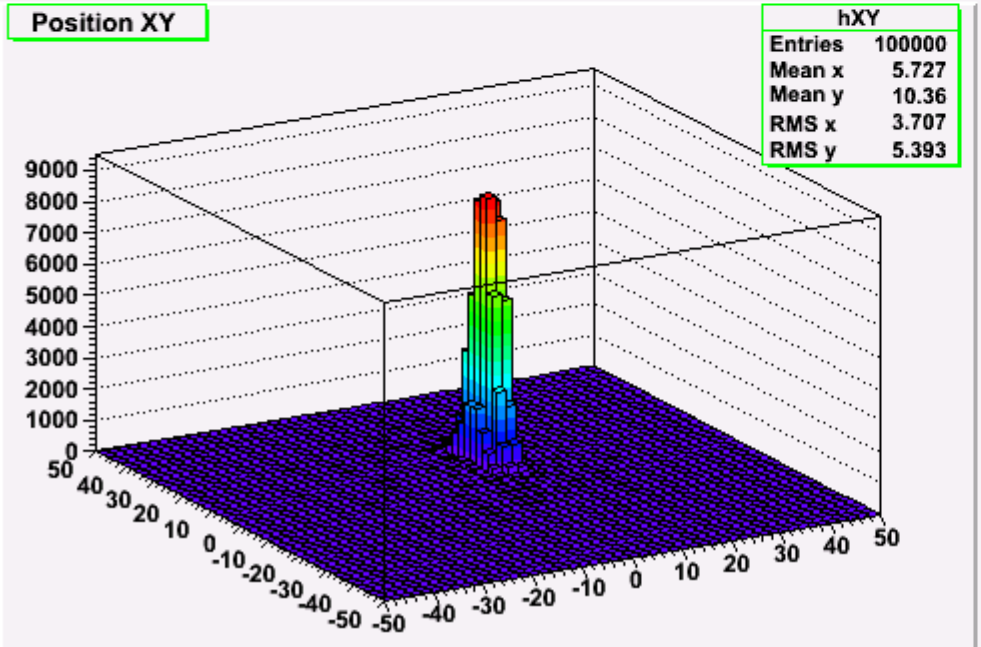
Anis=(R30)-(R-30)-(L30)+(L-30)/(R30)+(R-30)+(L30)+(L-30)

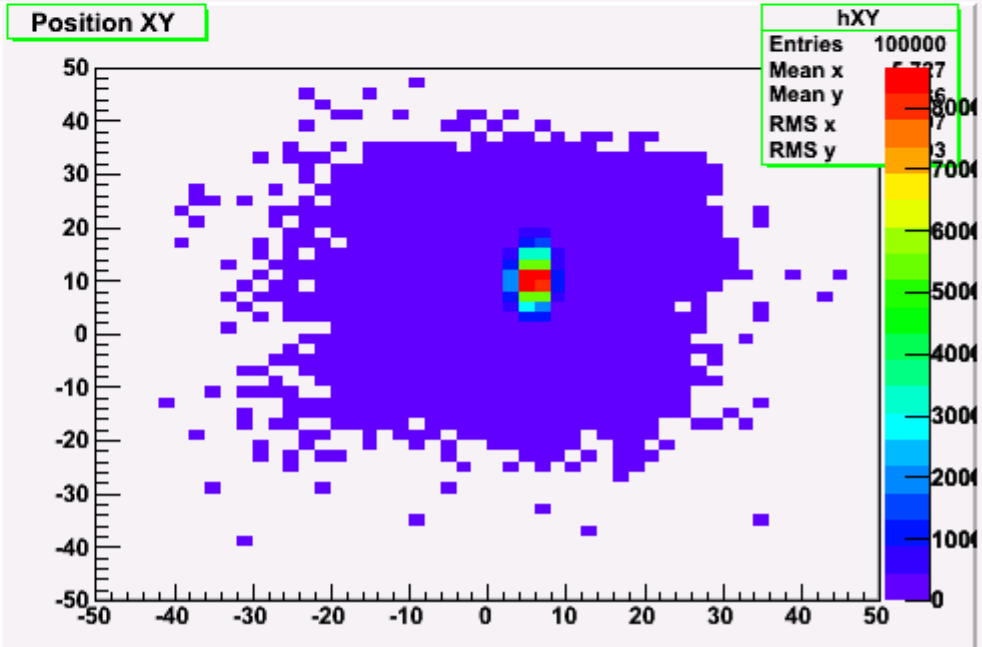


BEAM position

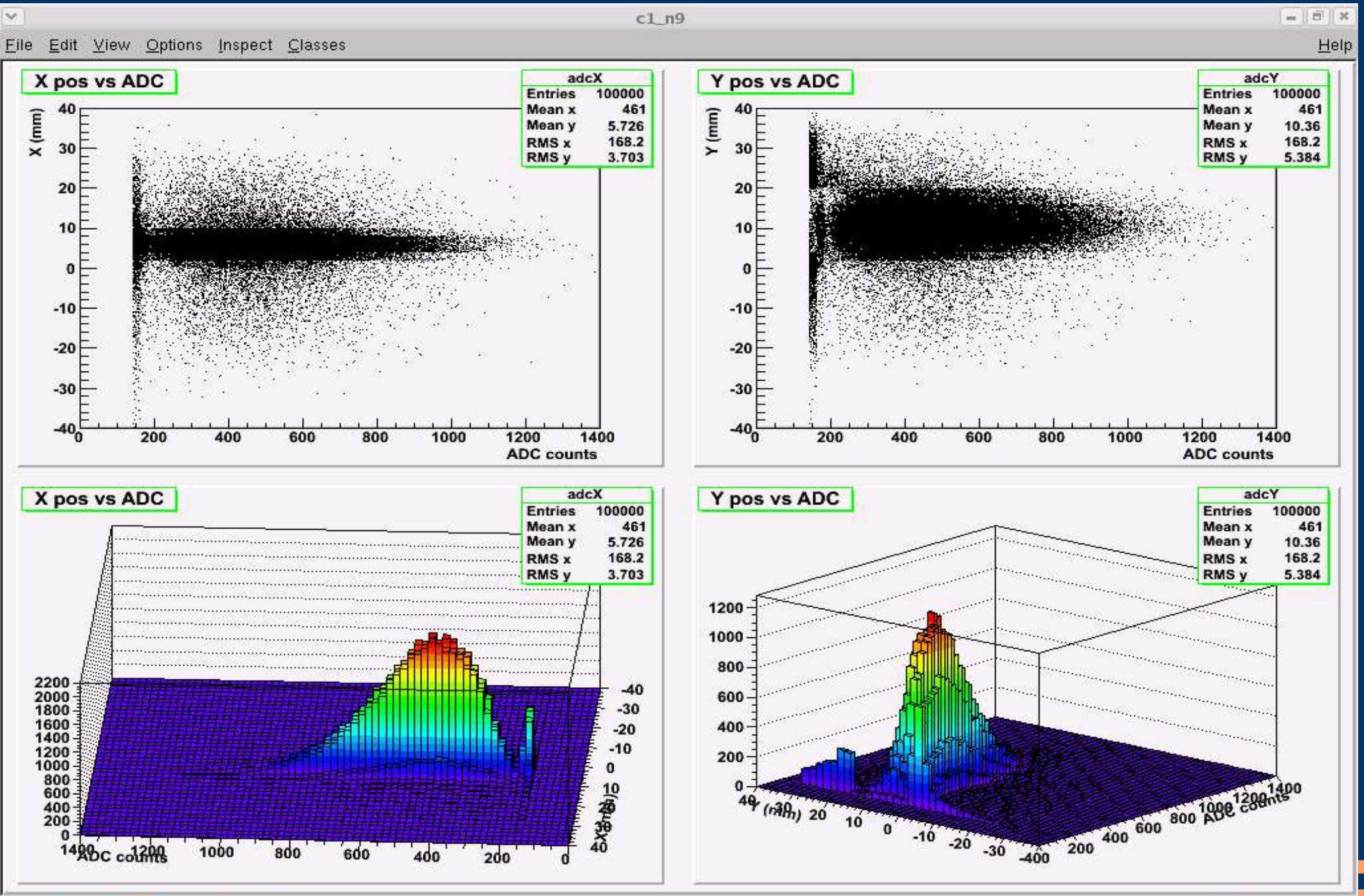




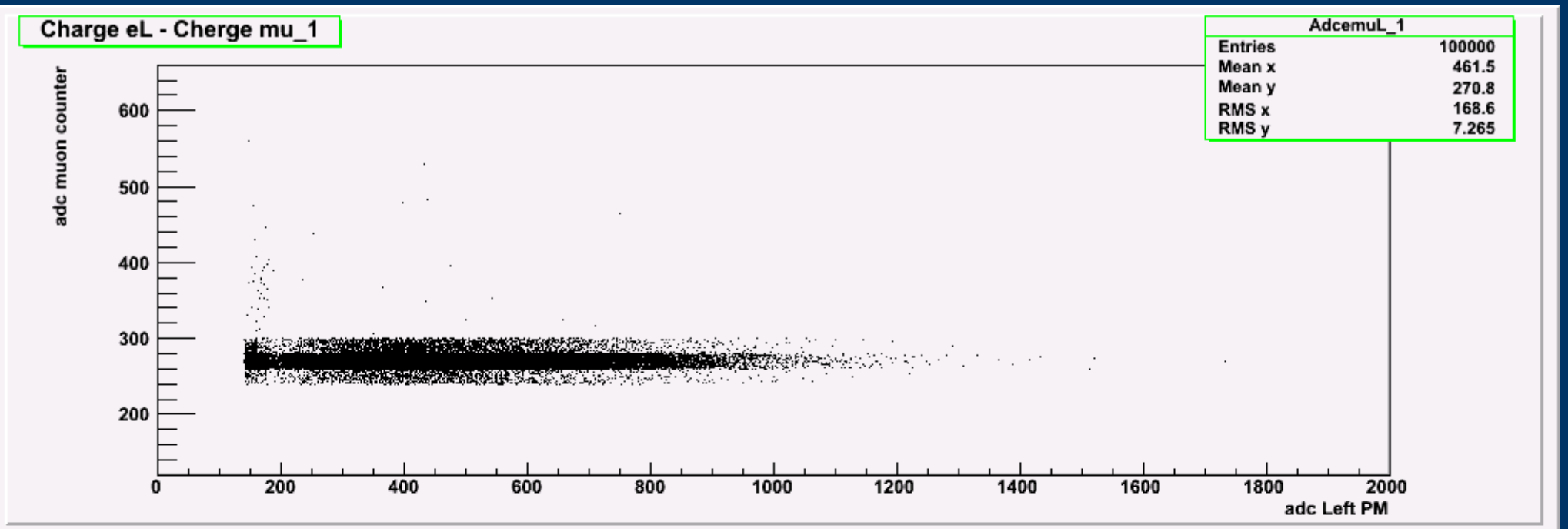


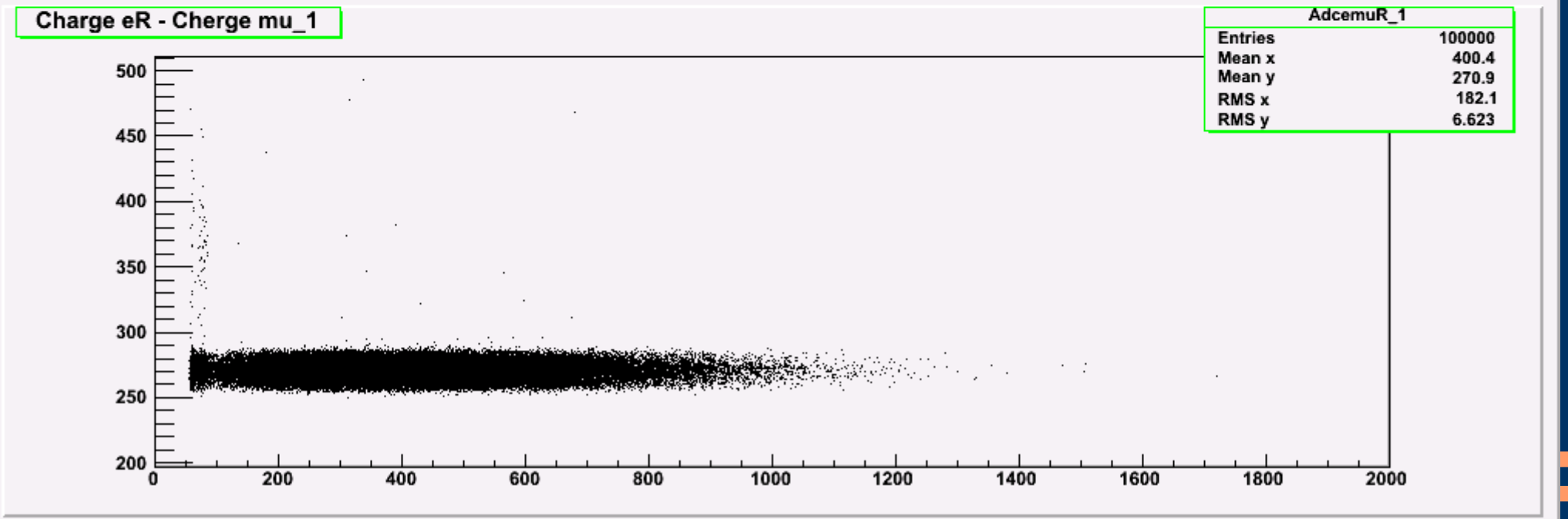


ADC vs beam position *run 182@0degree, PMleft*



ADC Muon Counter (Downstream vs ADC signal)





ADC with only muons (cut on ADC Downstream>300)