

# Beam Studies December 2014

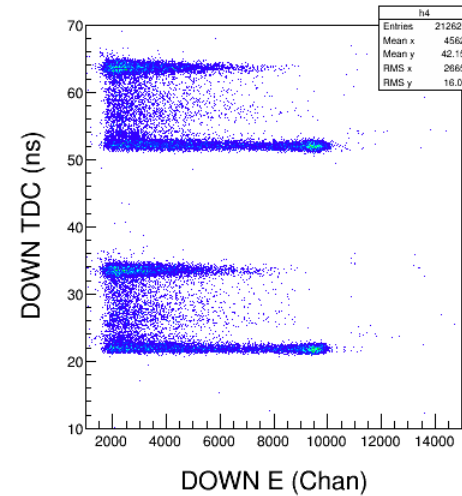
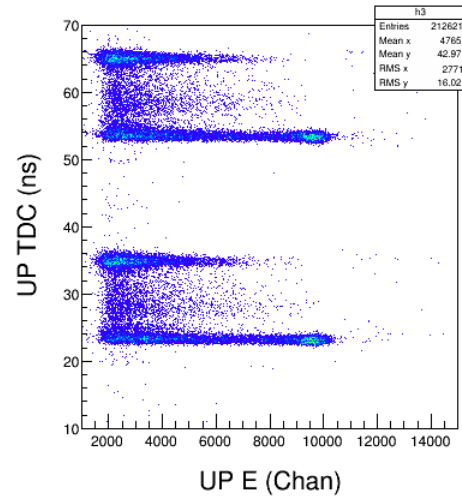
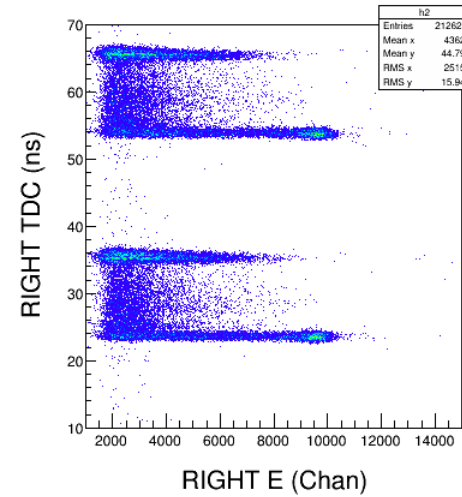
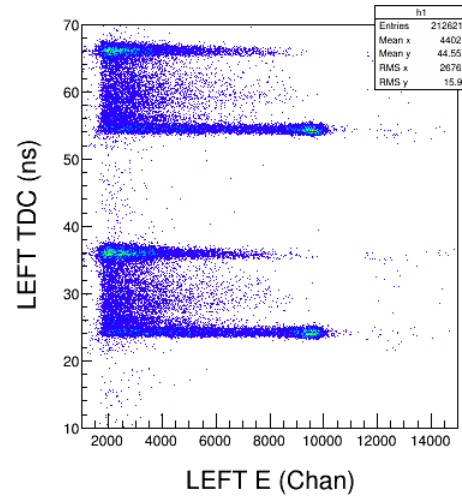
Runs: 7821, 7822, and 7860

December 29, 2014

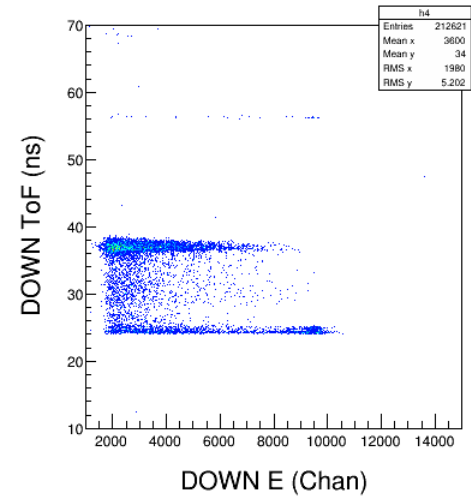
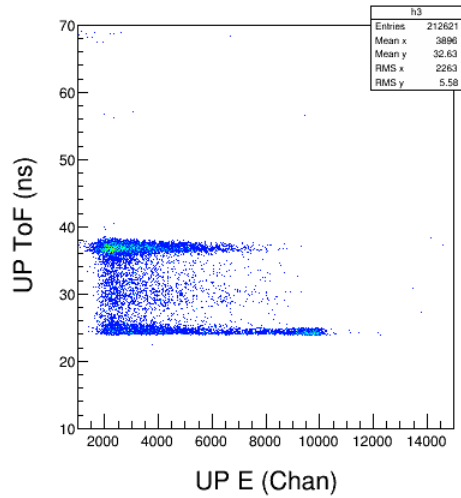
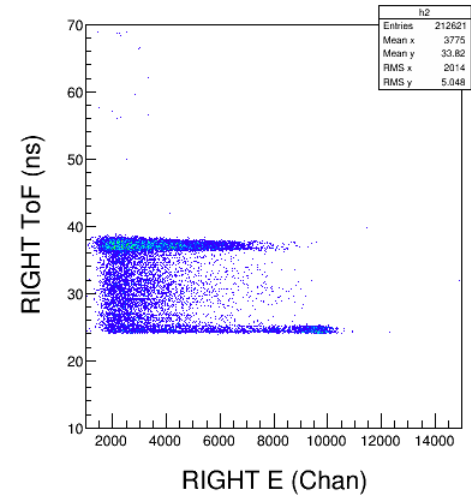
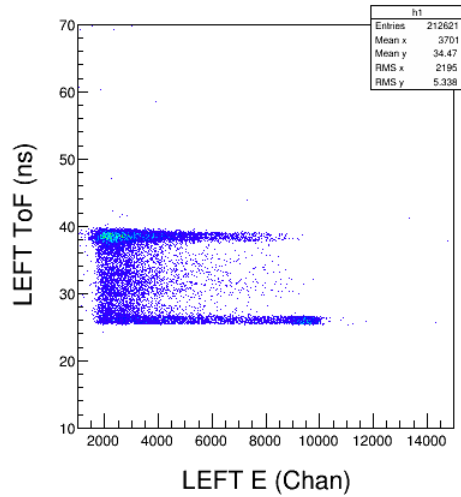
# Outline

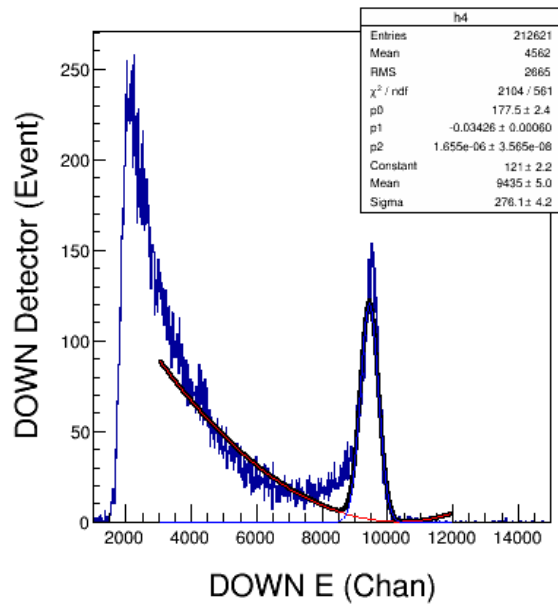
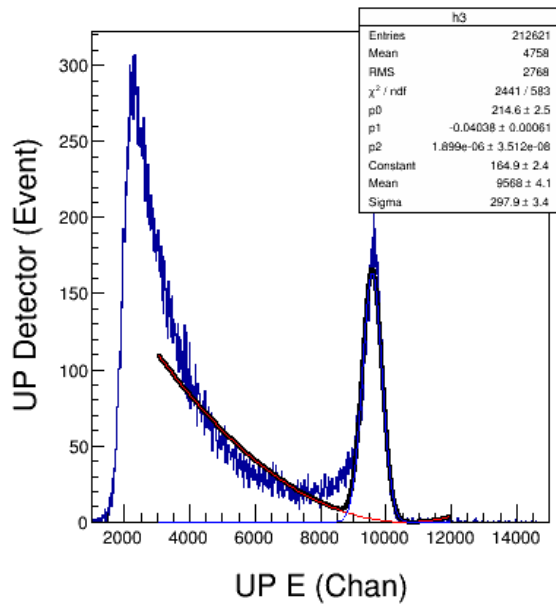
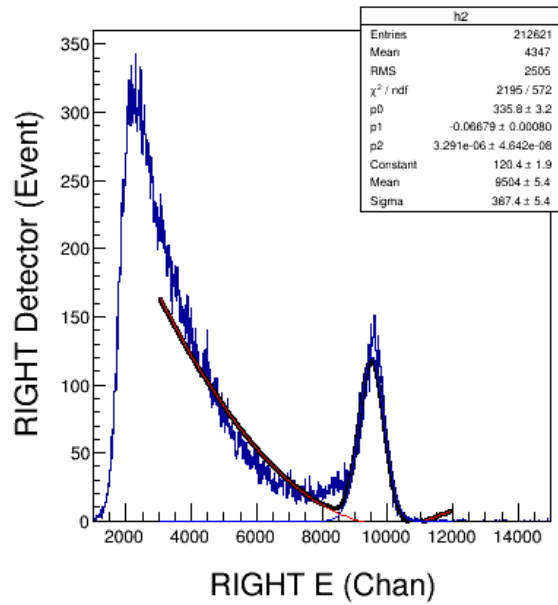
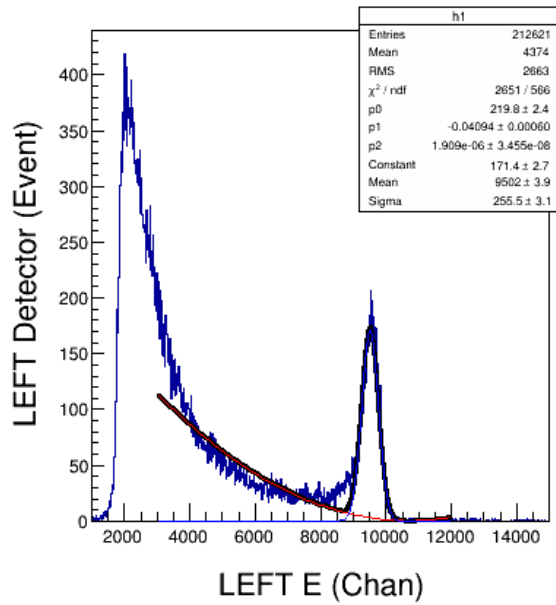
- FADC and TDC Data:
  - Mott\_Semilnt Mode: 7860
  - Mott\_Sample Mode: 7859
  
- Direct and Delayed Analysis:
  - No Delay: 7821
  - Delay = 8: 7822

# Mott\_Semilnt – Run 7860

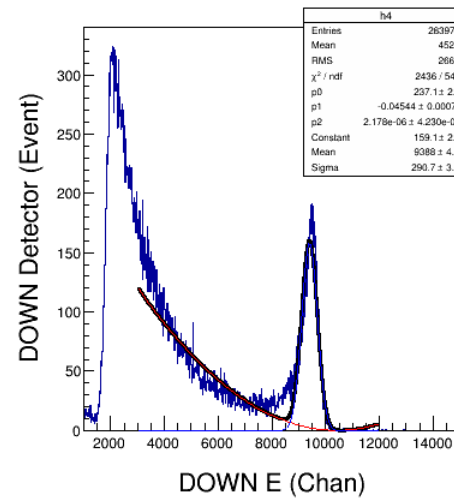
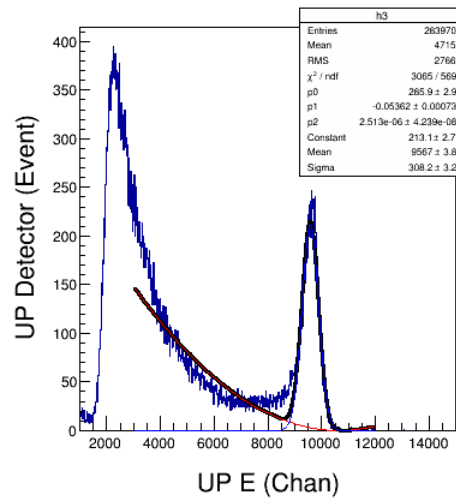
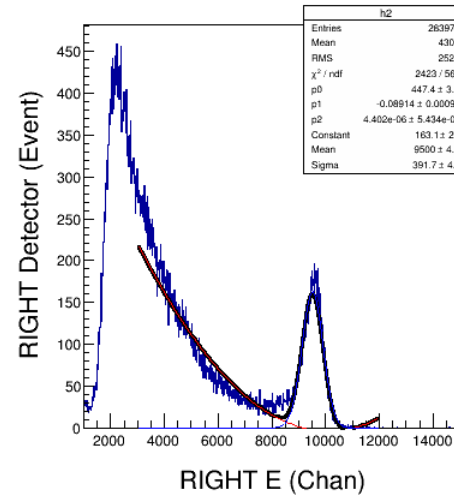
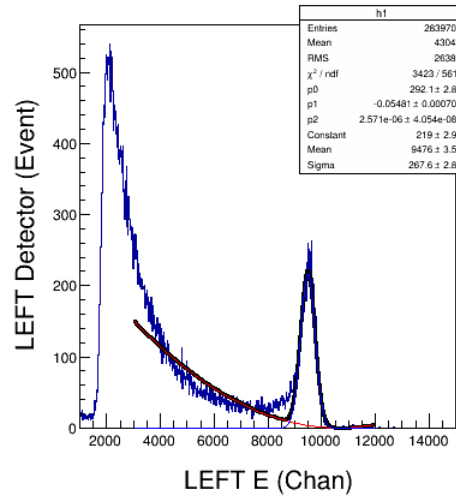


FADC Time





# Mott\_Sample – Run 7859



# Run 7821 – No Delay

- Mott Asym UD (%) =  $-14.07 \pm 0.78$
- Mott Asym LR (%) =  $1.35 \pm 0.77$
- UD Instrumental (Detector Efficiency and Solid Angle)  
A1x (%) =  $-8.17 \pm 0.79$
- LR Instrumental (Detector Efficiency and Solid Angle)  
A1y (%) =  $-0.88 \pm 0.77$
- UD Instrumental (Beam Current and Target Thickness)  
A2x (%) =  $1.09 \pm 0.79$
- LR Instrumental (Beam Current and Target Thickness)  
A2y (%) =  $-0.69 \pm 0.77$

# Run 7822 – Delay = 8

- Mott Asym UD (%) =  $-11.81 \pm 0.66$
- Mott Asym LR (%) =  $-0.34 \pm 0.66$
- UD Instrumental (Detector Efficiency and Solid Angle)  
A1x (%) =  $-9.15 \pm 0.67$
- LR Instrumental (Detector Efficiency and Solid Angle)  
A1y (%) =  $0.90 \pm 0.66$
- UD Instrumental (Beam Current and Target Thickness)  
A2x (%) =  $0.70 \pm 0.67$
- LR Instrumental (Beam Current and Target Thickness)  
A2y (%) =  $-0.74 \pm 0.66$



# Summary

- Semi\_Int Mode has approximately similar energy resolution as Mott\_Sample mode
- Delayed analysis seems to work – need more data to be sure