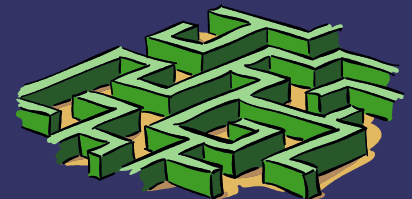


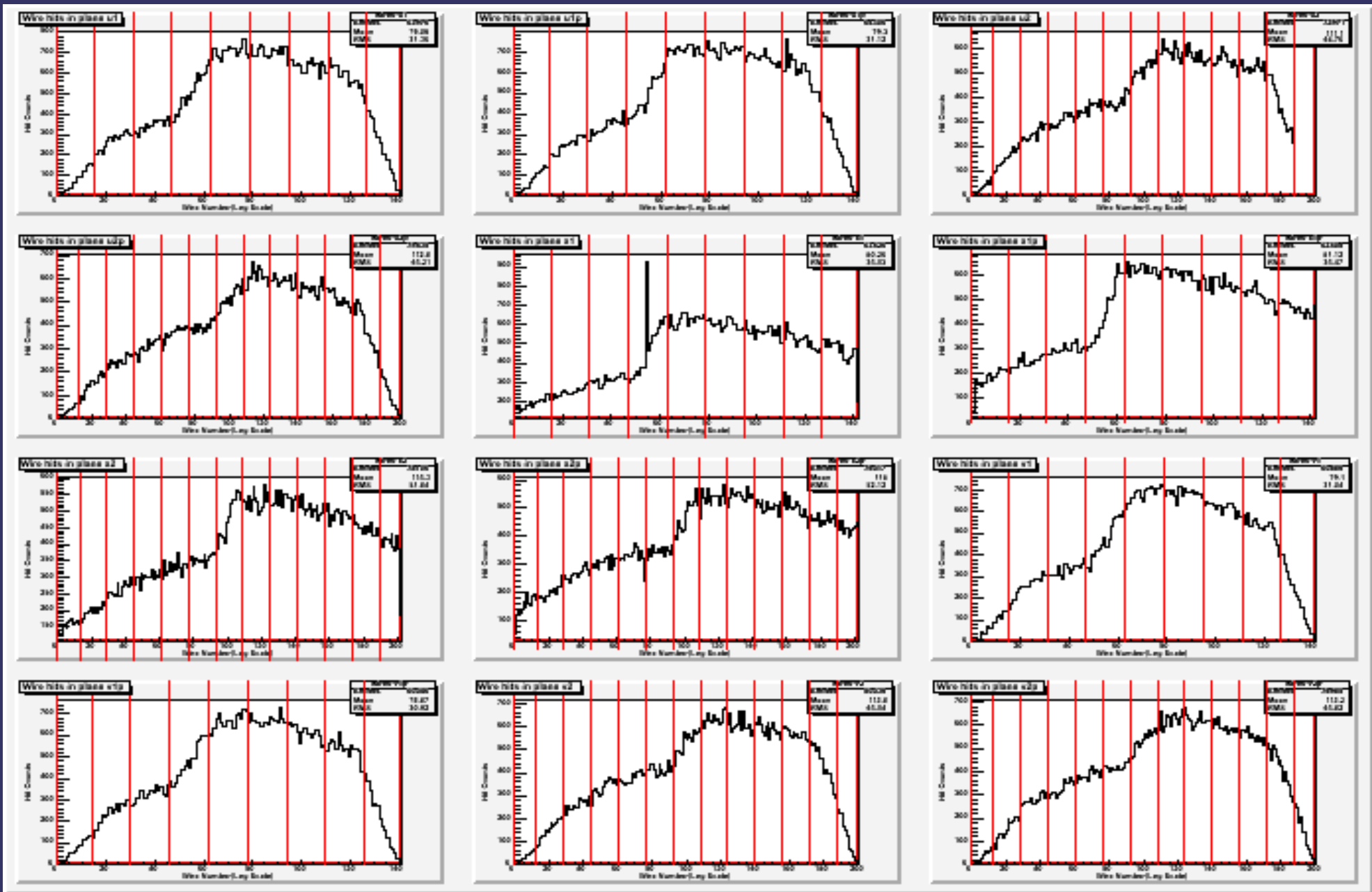
*Wire Chamber 1+2 Performance
During π^0*

Xin Qian

Duke University



Hit Pattern



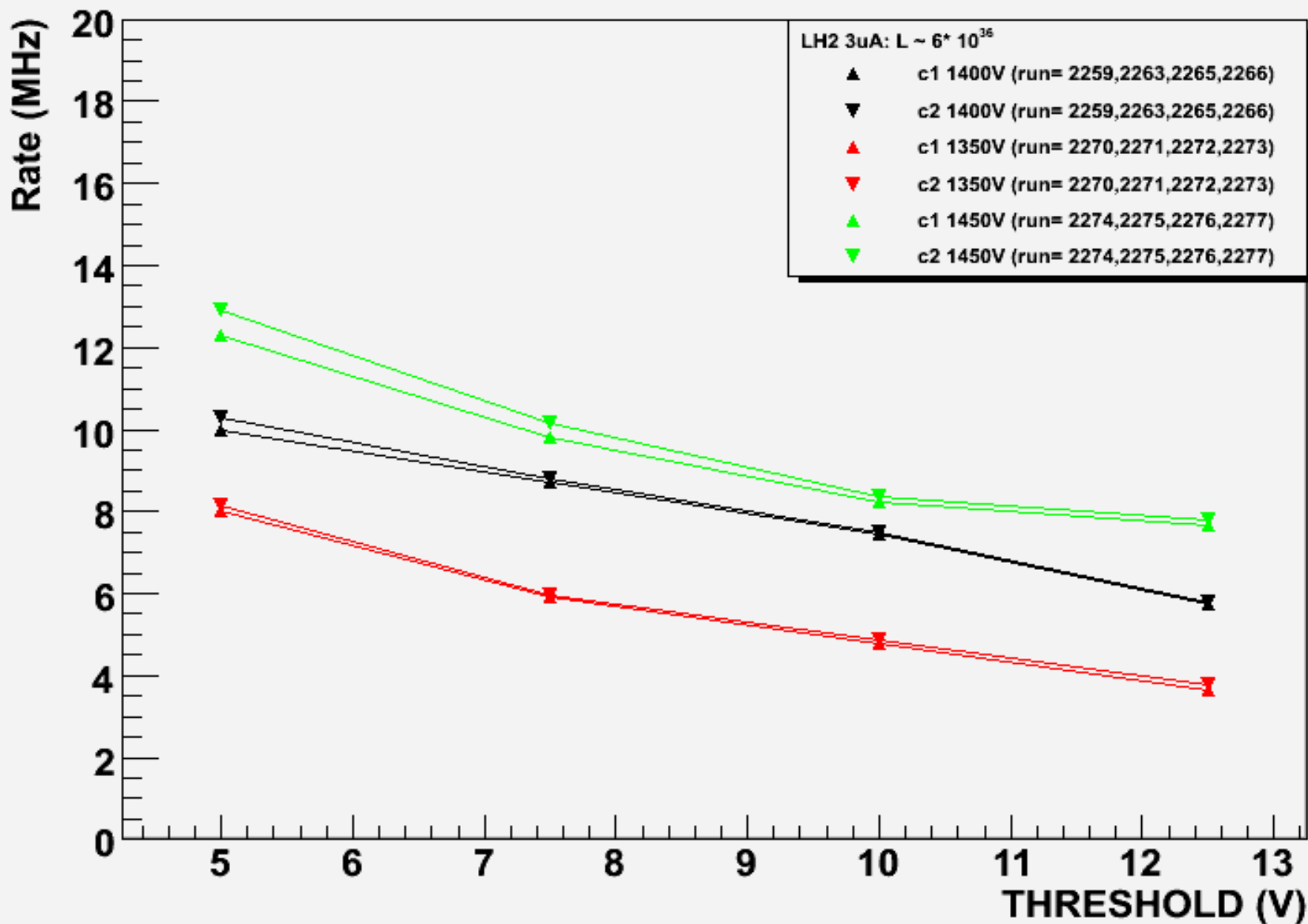
Hit Pattern

- ⇒ OK in general.
- ⇒
- ⇒ One busy wire, possible due to cable
- ⇒
- ⇒ More Noise in the second half of the chamber
 -
 - Correspond to low energy electrons, bending the opposite way.
 -
 - The kink should due to acceptance cutoff



Hydrogen $L \sim 6 \times 10^{36}$

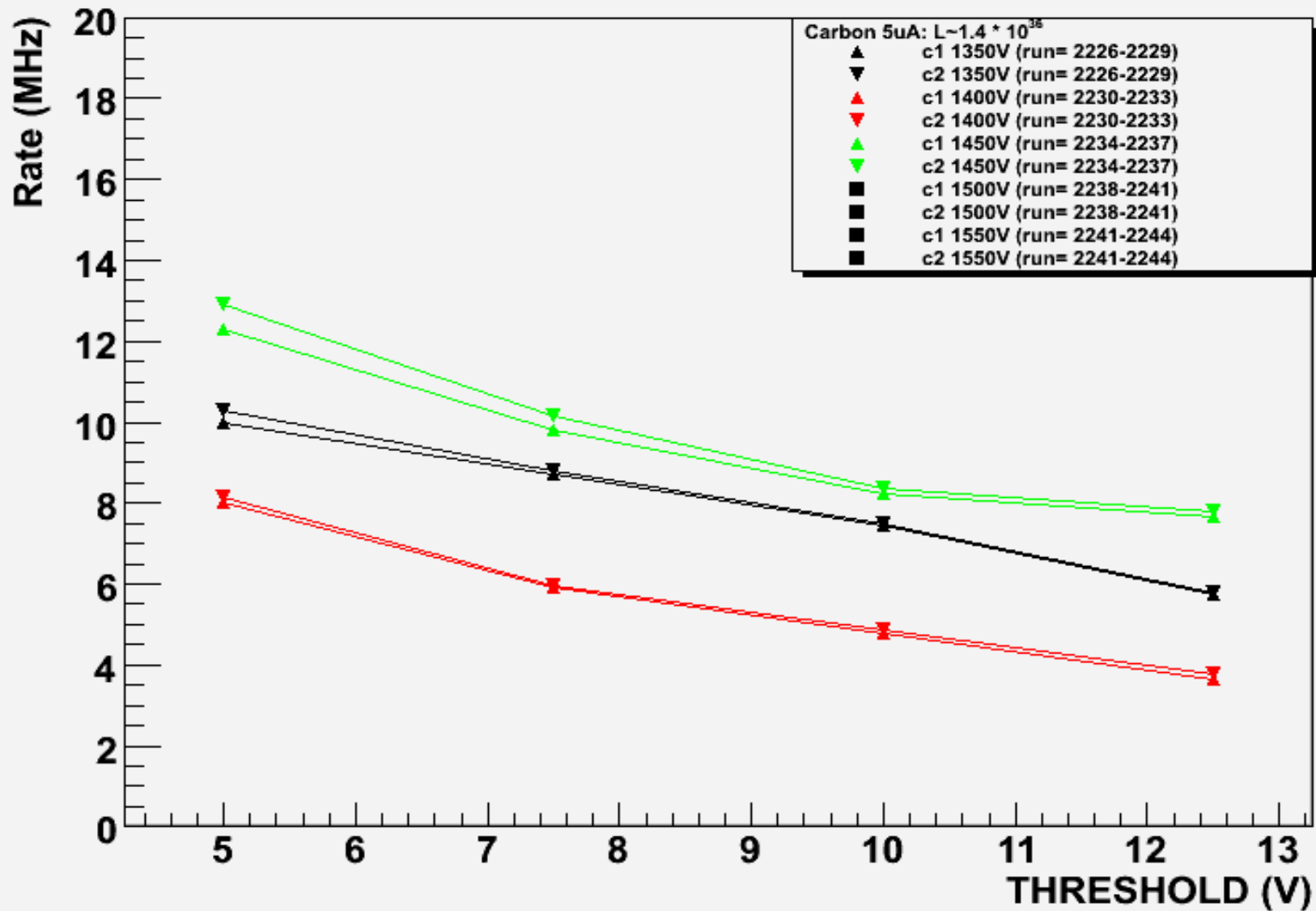
Chamber rate



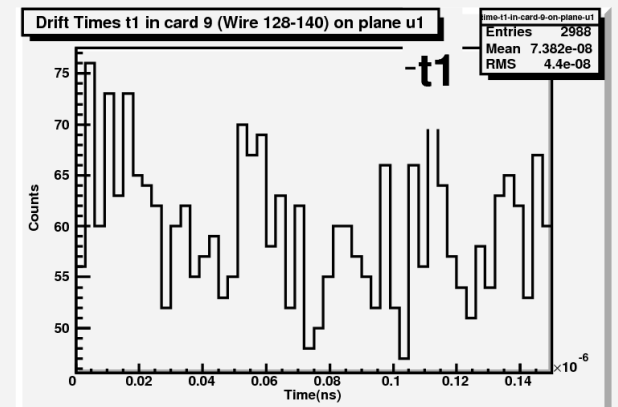
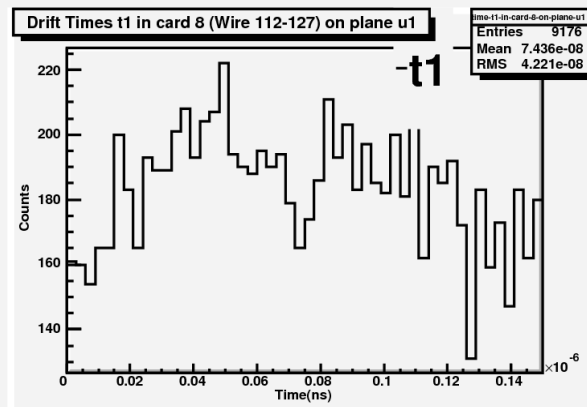
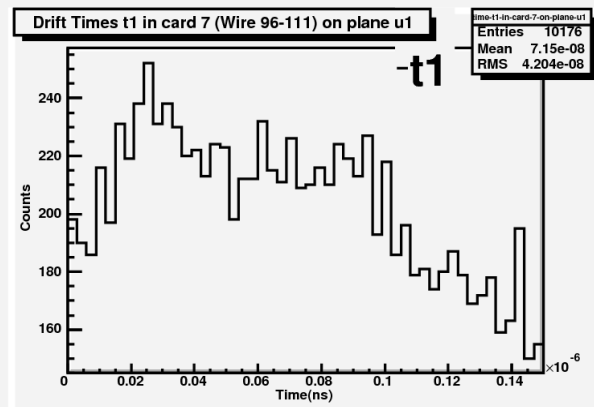
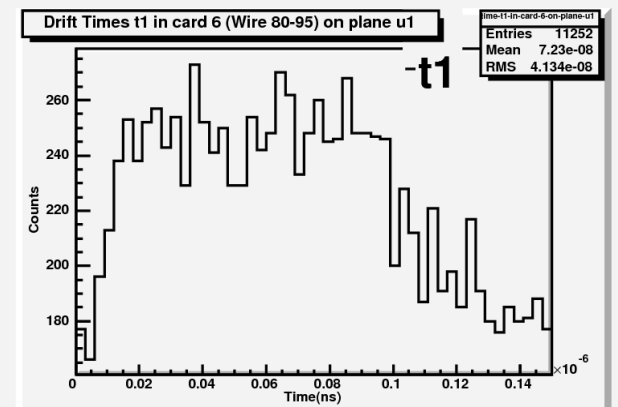
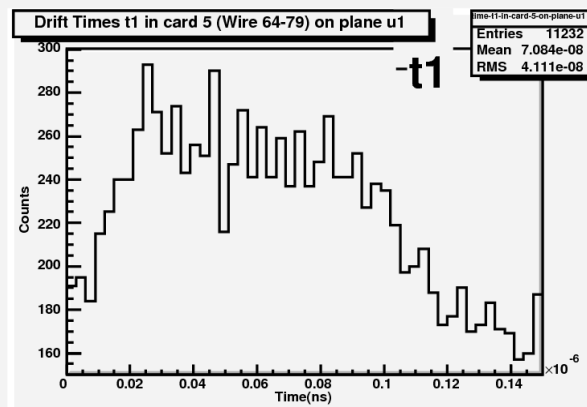
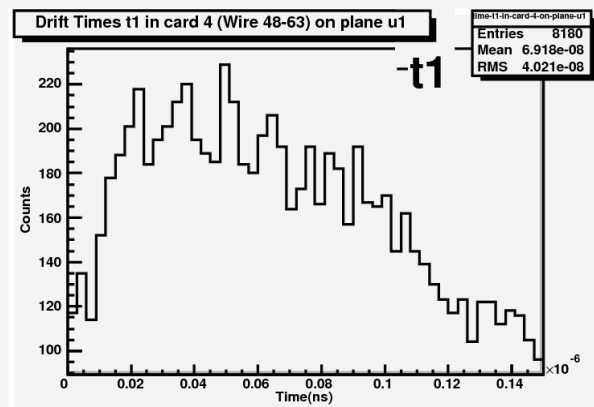
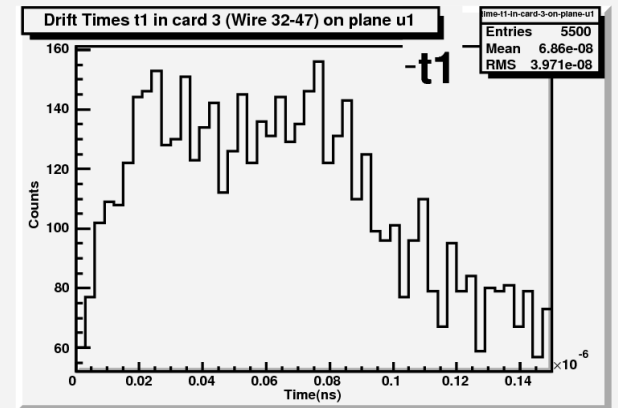
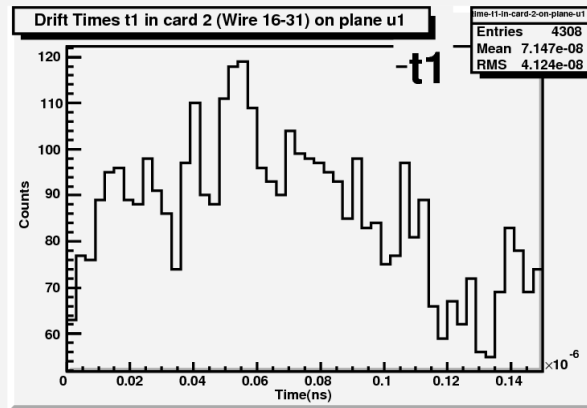
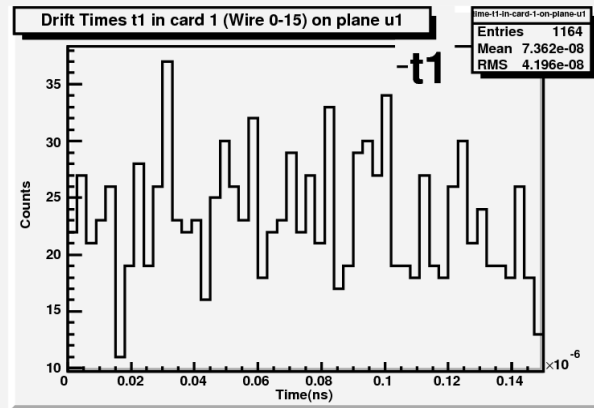
Carbon $L \sim 1.4 \times 10^{36}$

→ TRANSVERSITY $L \sim 10^{36}$

Chamber rate

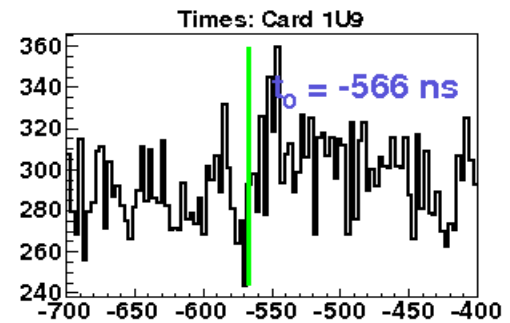
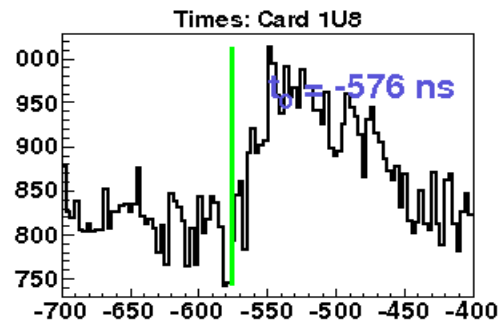
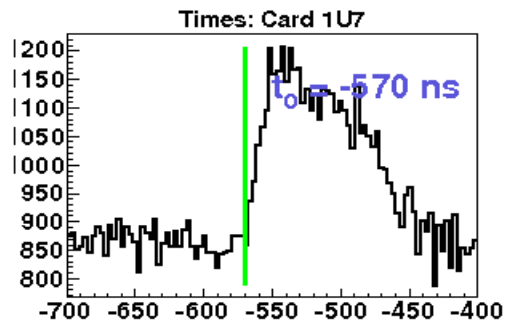
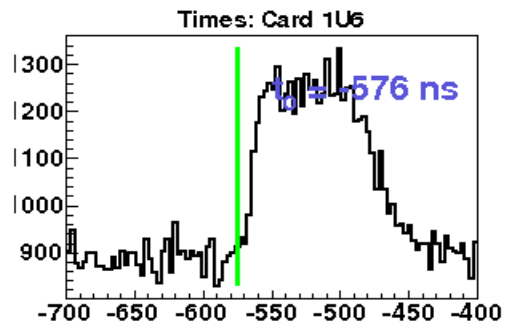
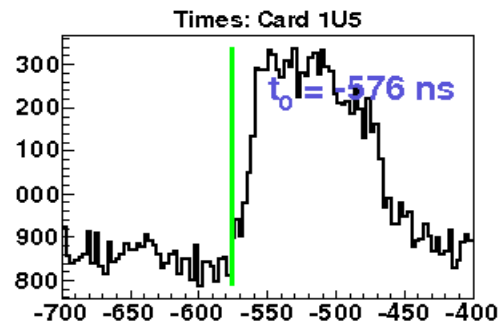
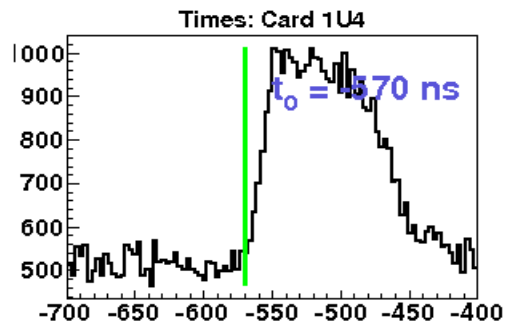
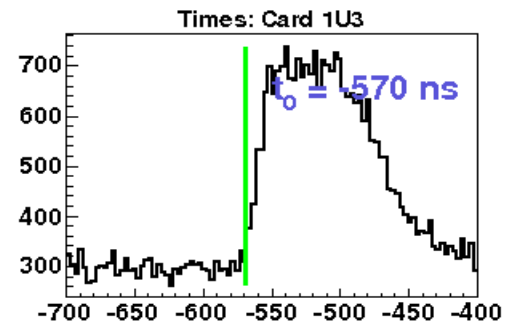
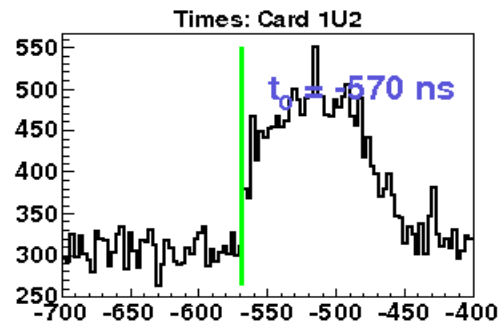
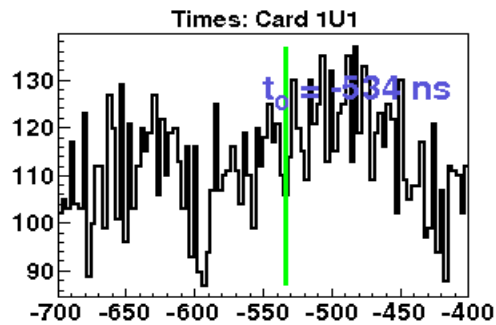


Drift Time



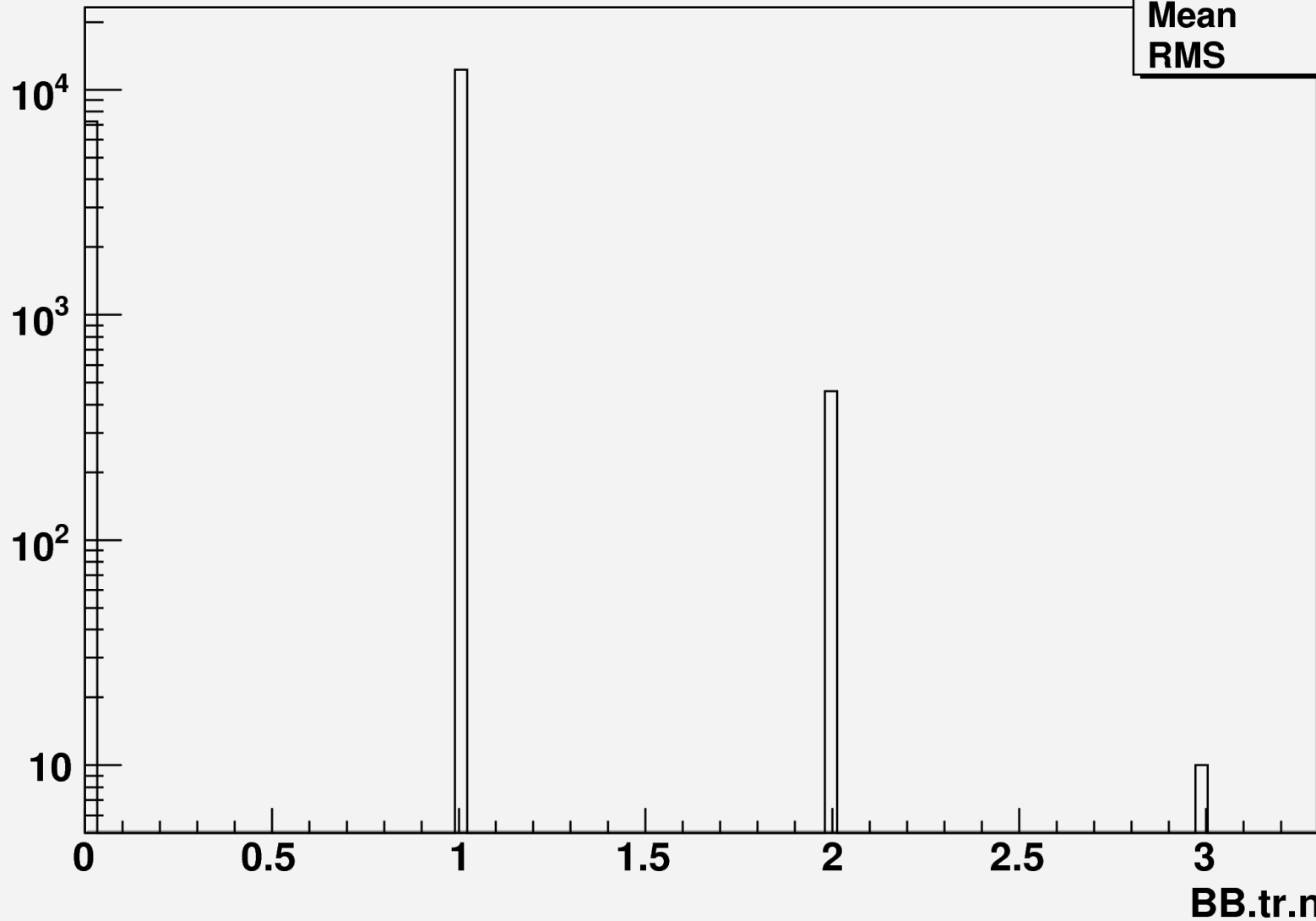
Drift Time

Thanks to Khem



Tracking (Ole)

BB.tr.n



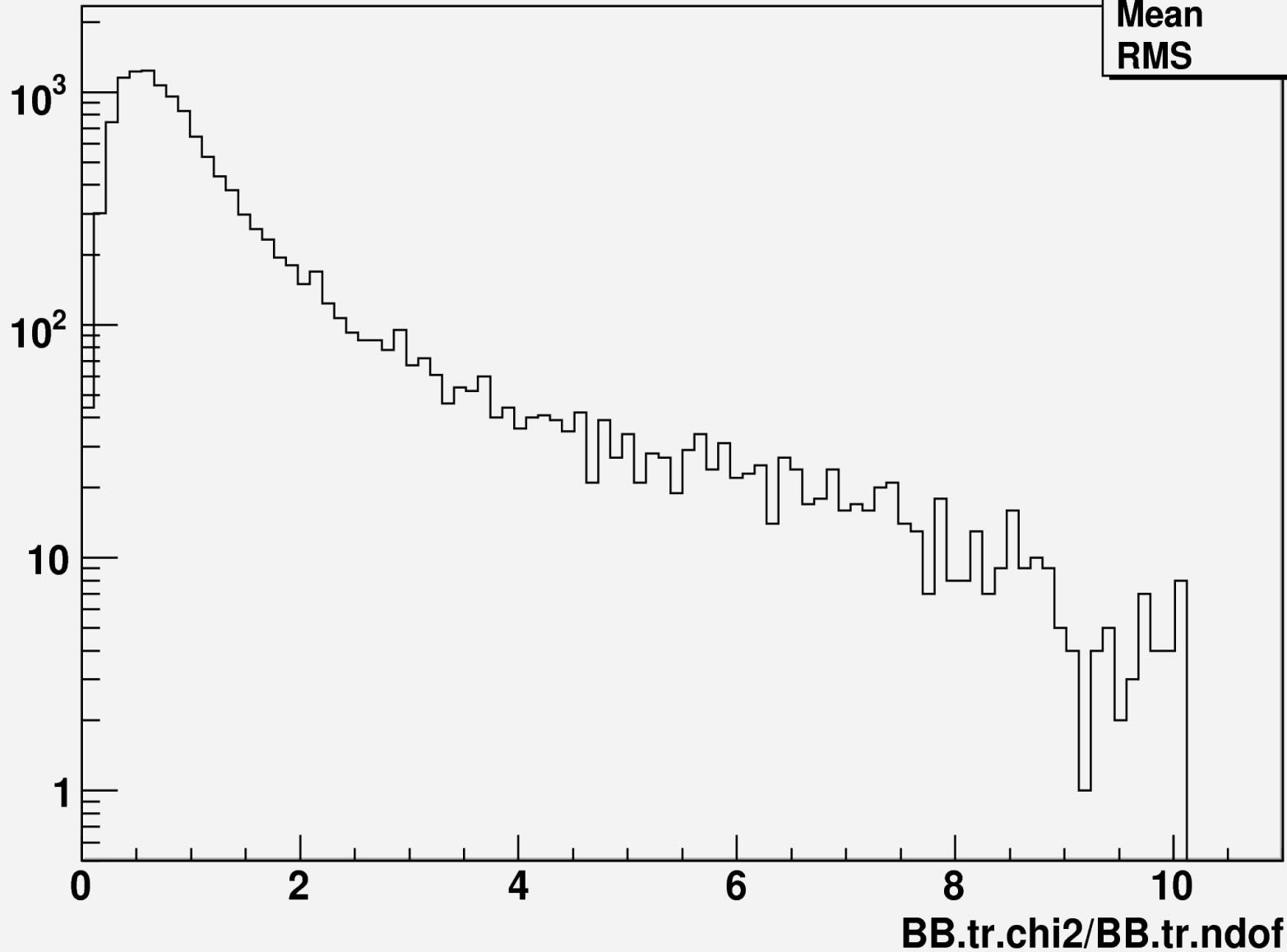
htemp	
Entries	20000
Mean	0.6615
RMS	0.5222

Tracking (Ole)

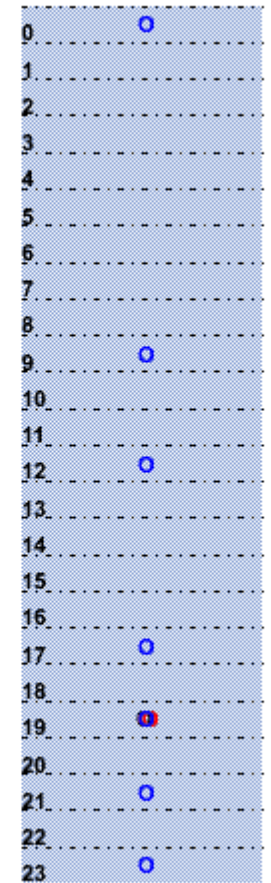
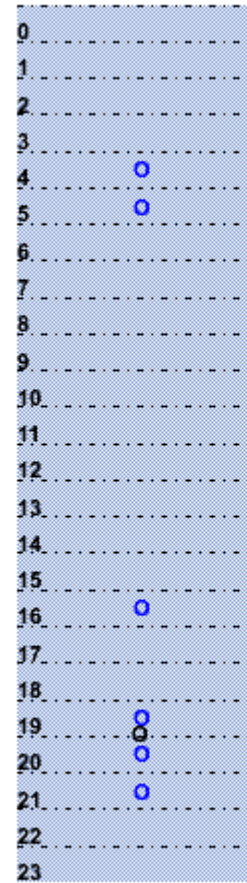
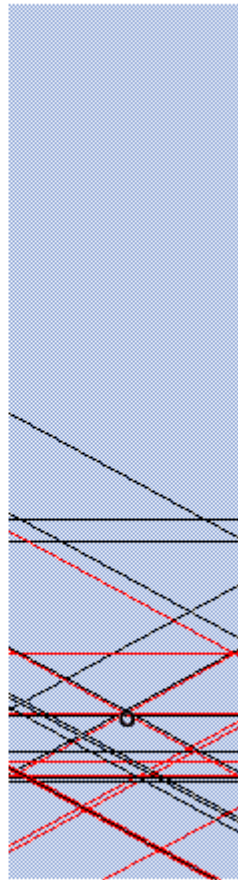
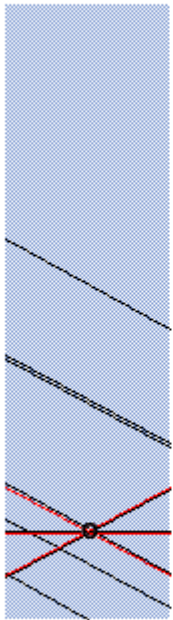
BB.tr.chi2/BB.tr.ndof

htemp

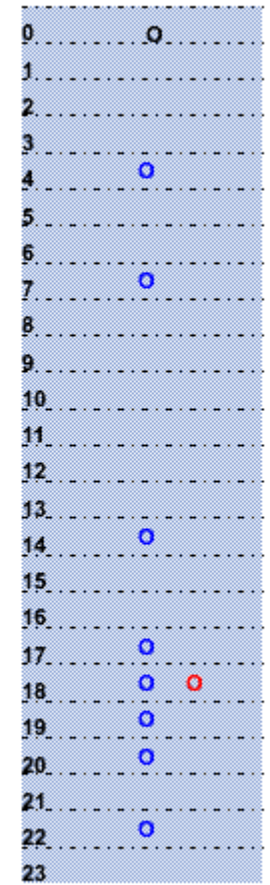
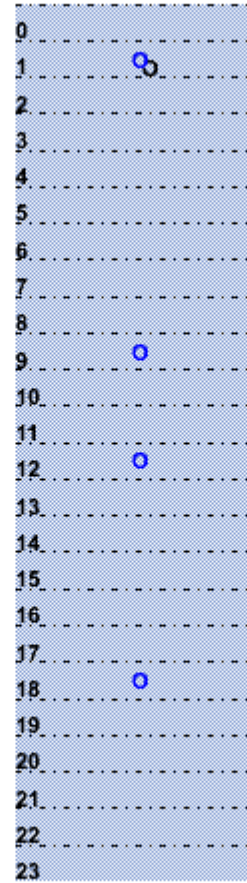
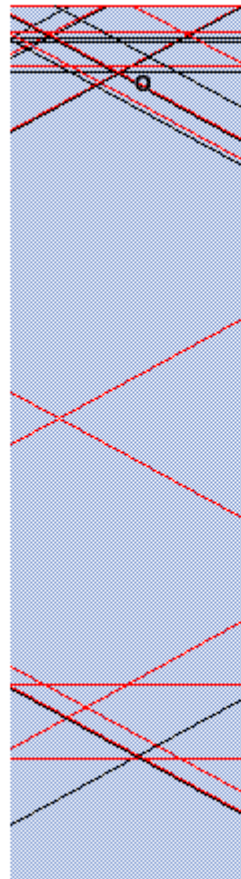
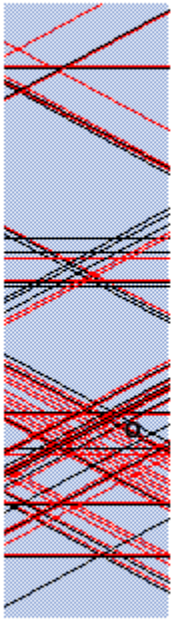
Entries	13230
Mean	1.439
RMS	1.59



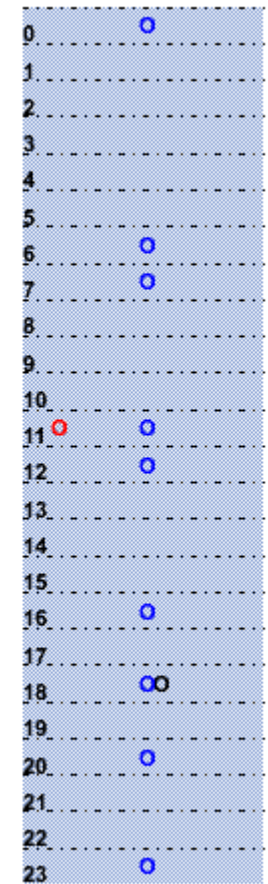
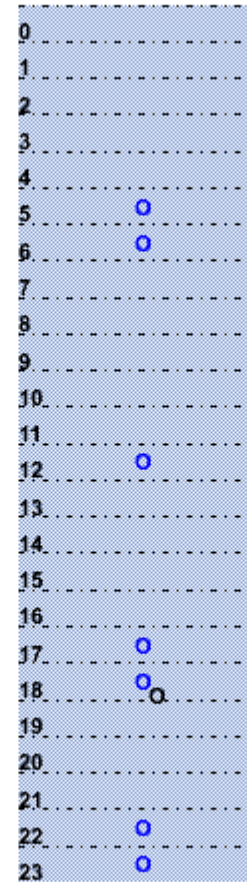
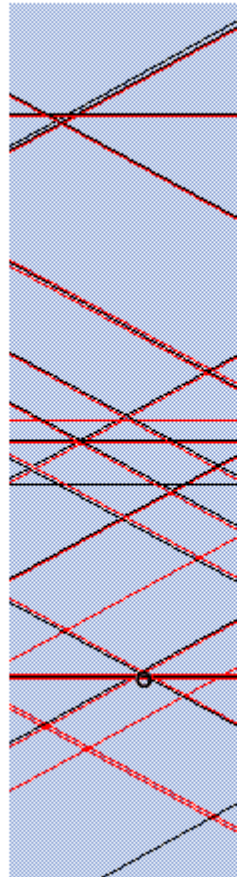
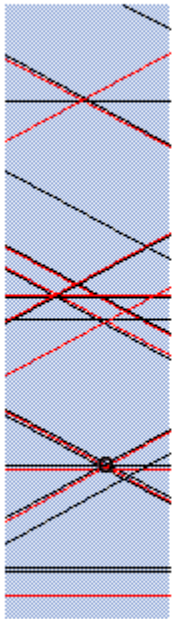
Event Display



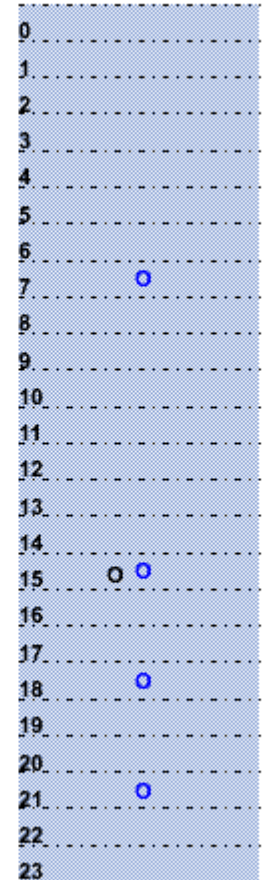
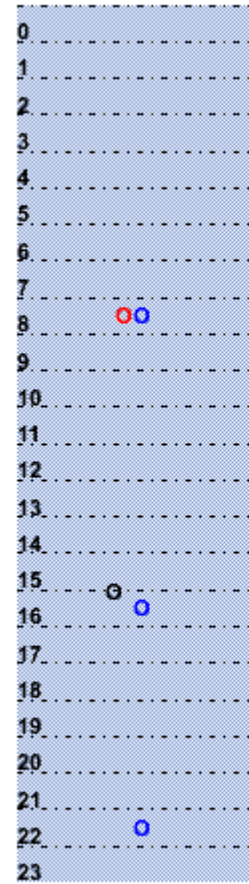
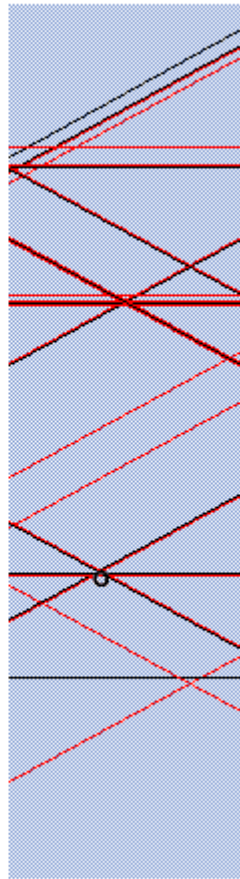
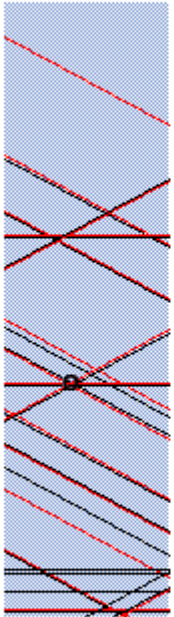
Event Display



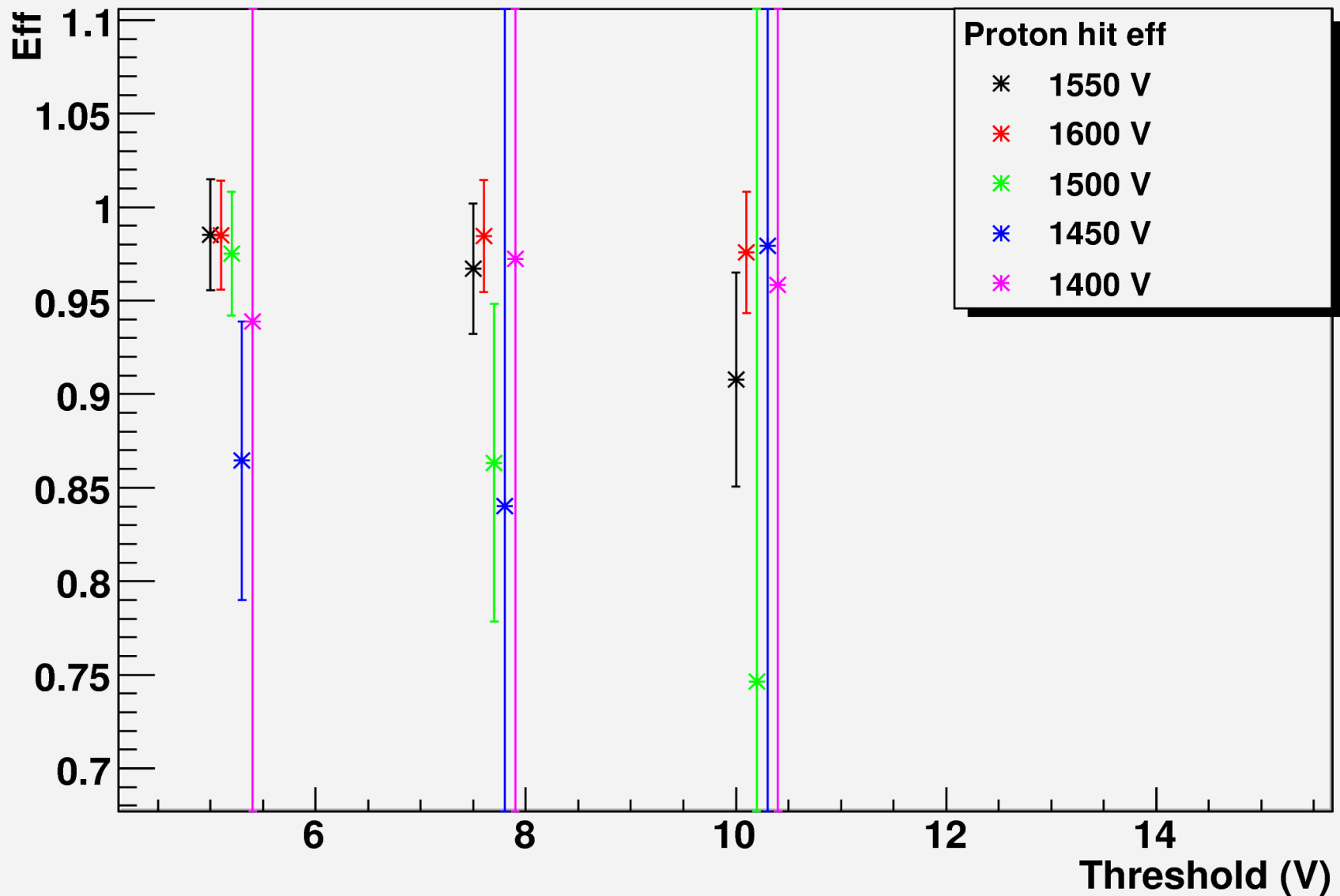
Still Some Problems (Database? Tracking?)



Still Some problems (Database? Tracking?)

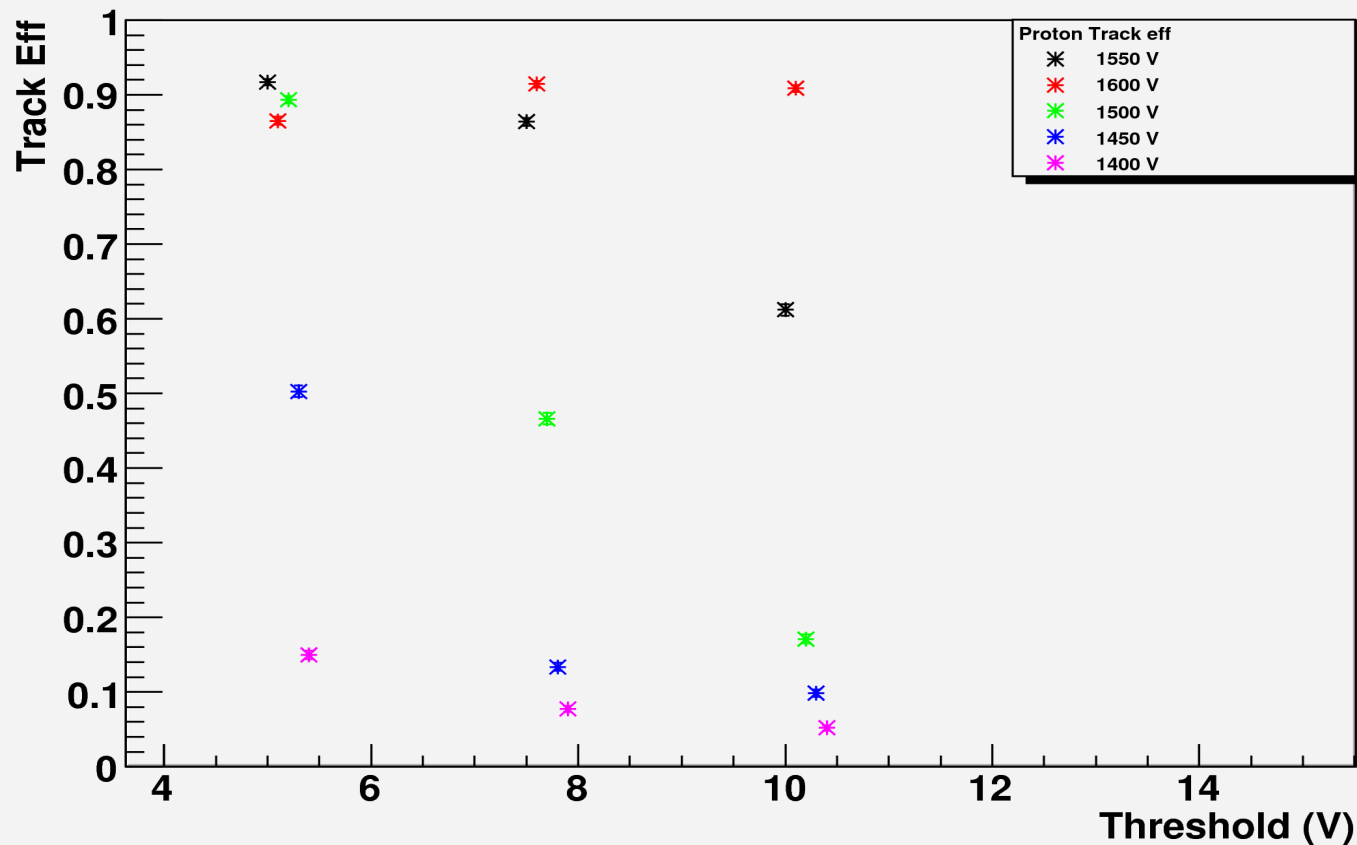


Hitting Efficiency (Ole)



Naive Tracking Efficiency (Khem)

- ➔ Add cut on Left arm PID.
- ➔ Add cut on Trigger Type.
- ➔ Add cut on Coincidence Timing.
- ➔ No cut on BigBite Scintillator ADC.



BigBite Software

- ➔ Need to add in shower system?
- ➔
- ➔ Two planes firing (Not an issue for TRANSVERSITY)?
- ➔
- ➔ Optics?

