RHIC p-Carbon Polarimeters

Status

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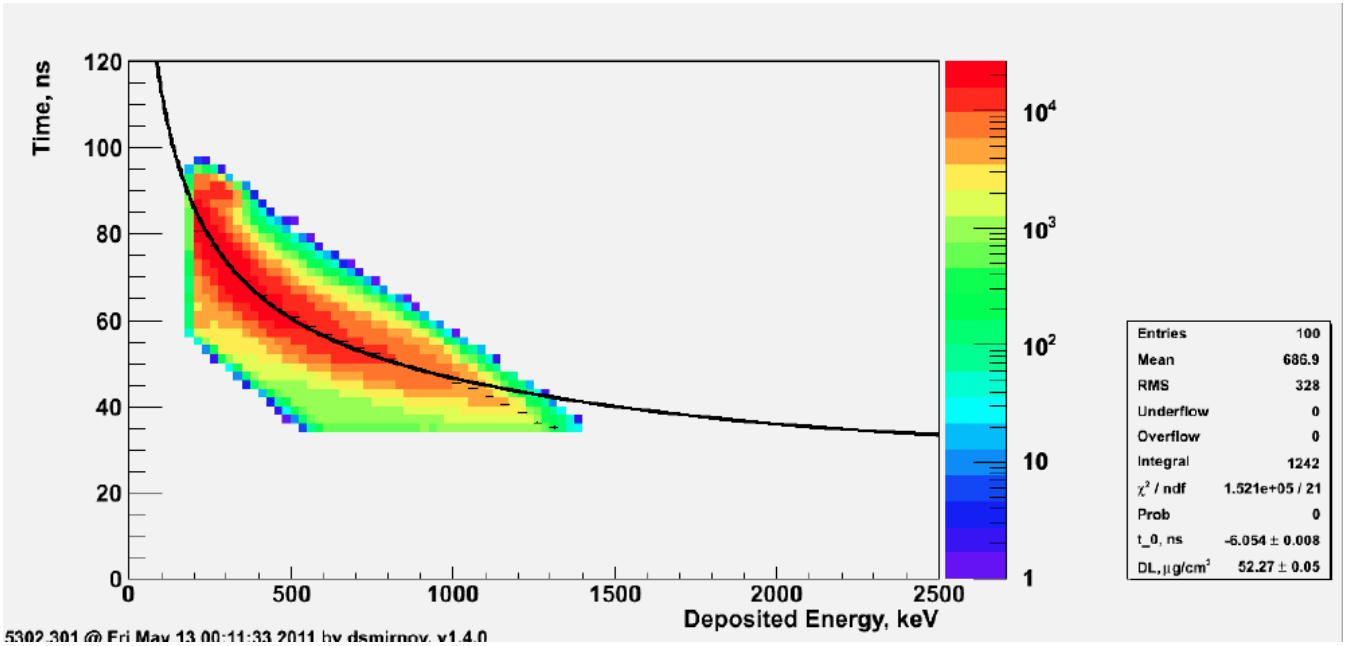
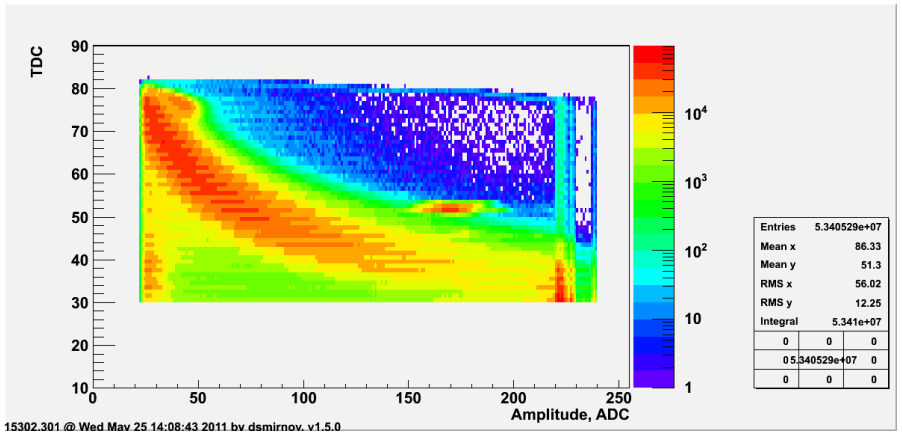
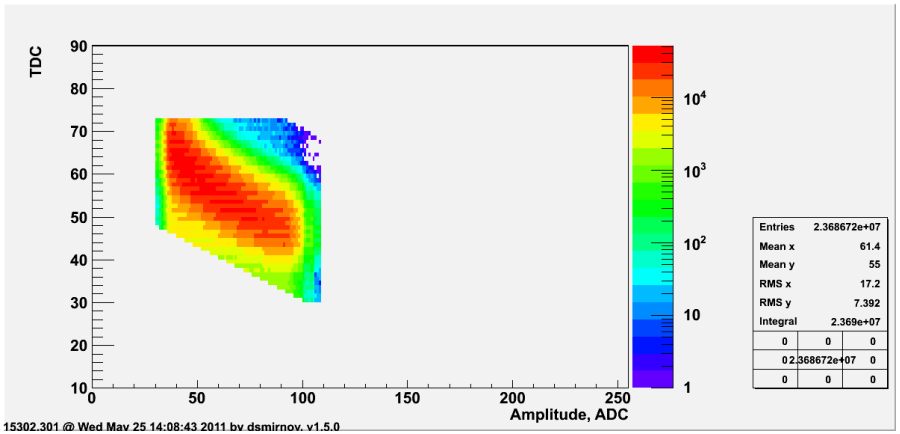
Noise Problem

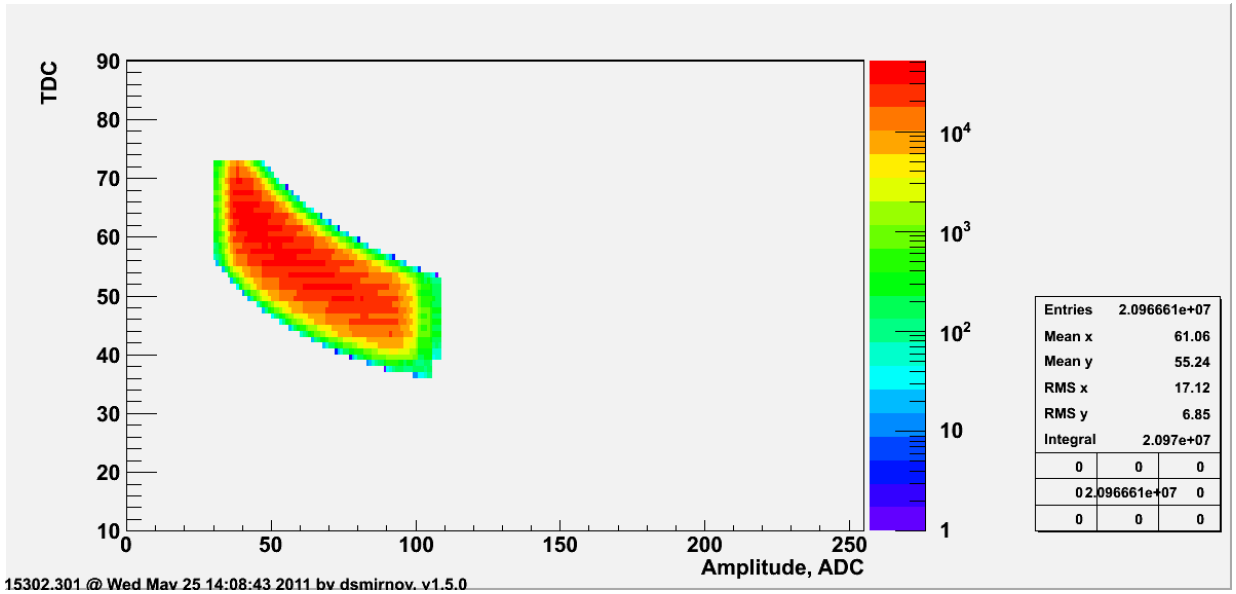


- Low energy noise at injection might have been diluting asymmetry (Yellow-2)
- Mass window was too big

Solution

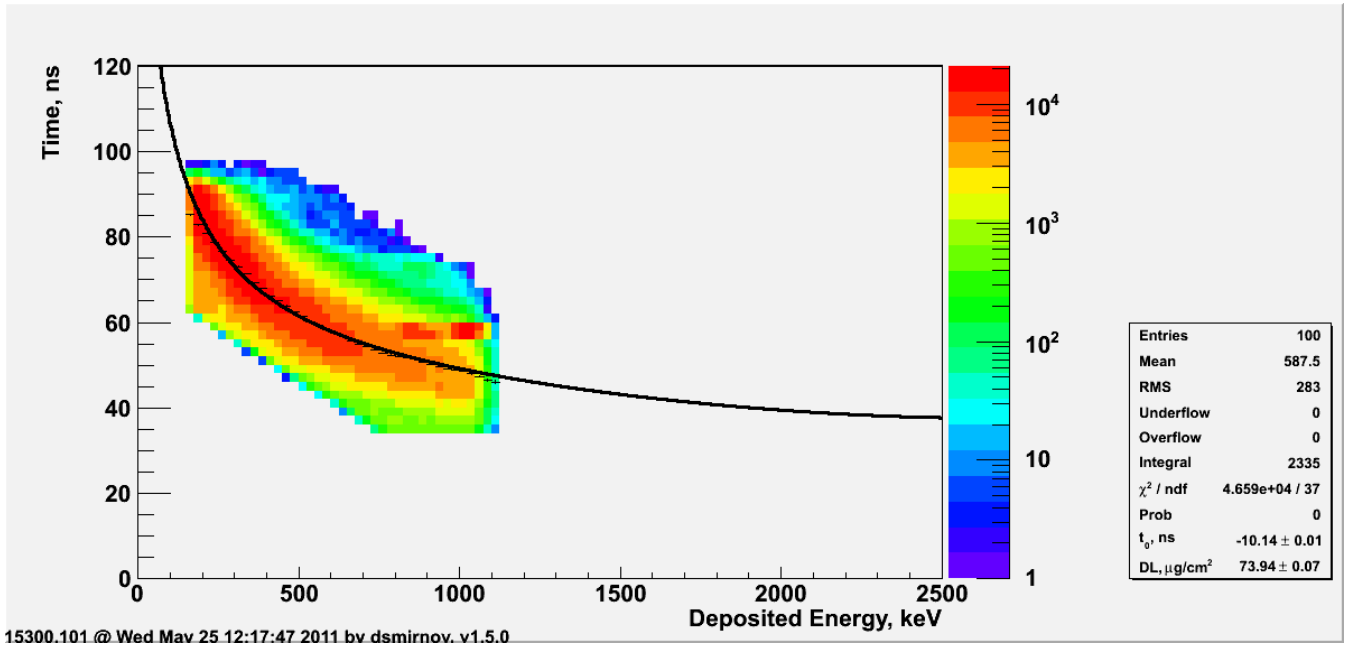






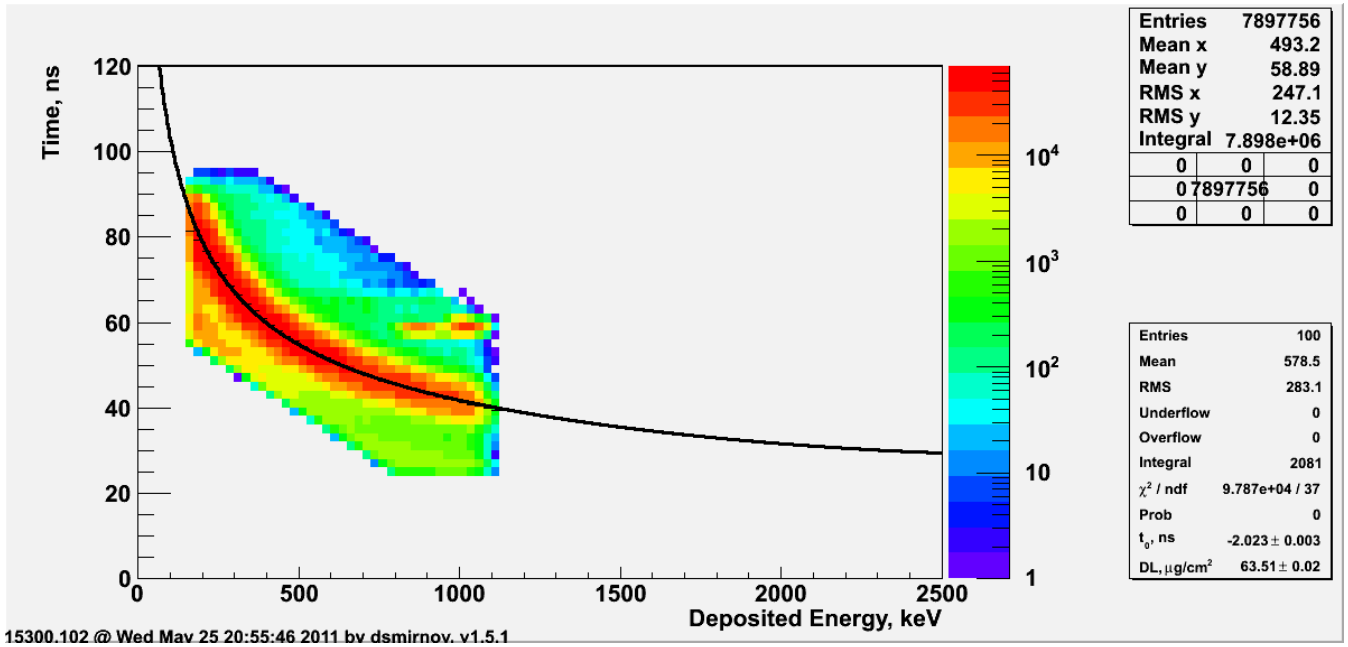
- Optimized cuts to remove the noise
- Smaller window for the mass cut (2.5σ)

Pulser Problem



- Pulser is too close to banana (Yellow-1, injection, Fill 15300)
- If not removed properly also can bias the final asymmetry
- Solution: Use empty bunches to subtract the pulser shape? (involved)

At Flattop


Time, ns
Deposited Energy, keV
Entries 7897756
Mean x 493.2
Mean y 58.89
RMS x 247.1
RMS y 12.35
Integral 7.898e+06
Entries 100
Mean 578.5
RMS 283.1
Underflow 0
Overflow 0
Integral 2081
χ² / ndf 9.787e+04 / 37
Prob 0
t0, ns -2.023 ± 0.003
DL, μg/cm² 63.51 ± 0.02
15300.102 @ Wed May 25 20:55:46 2011 by dsmirnov, v1.5.1

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