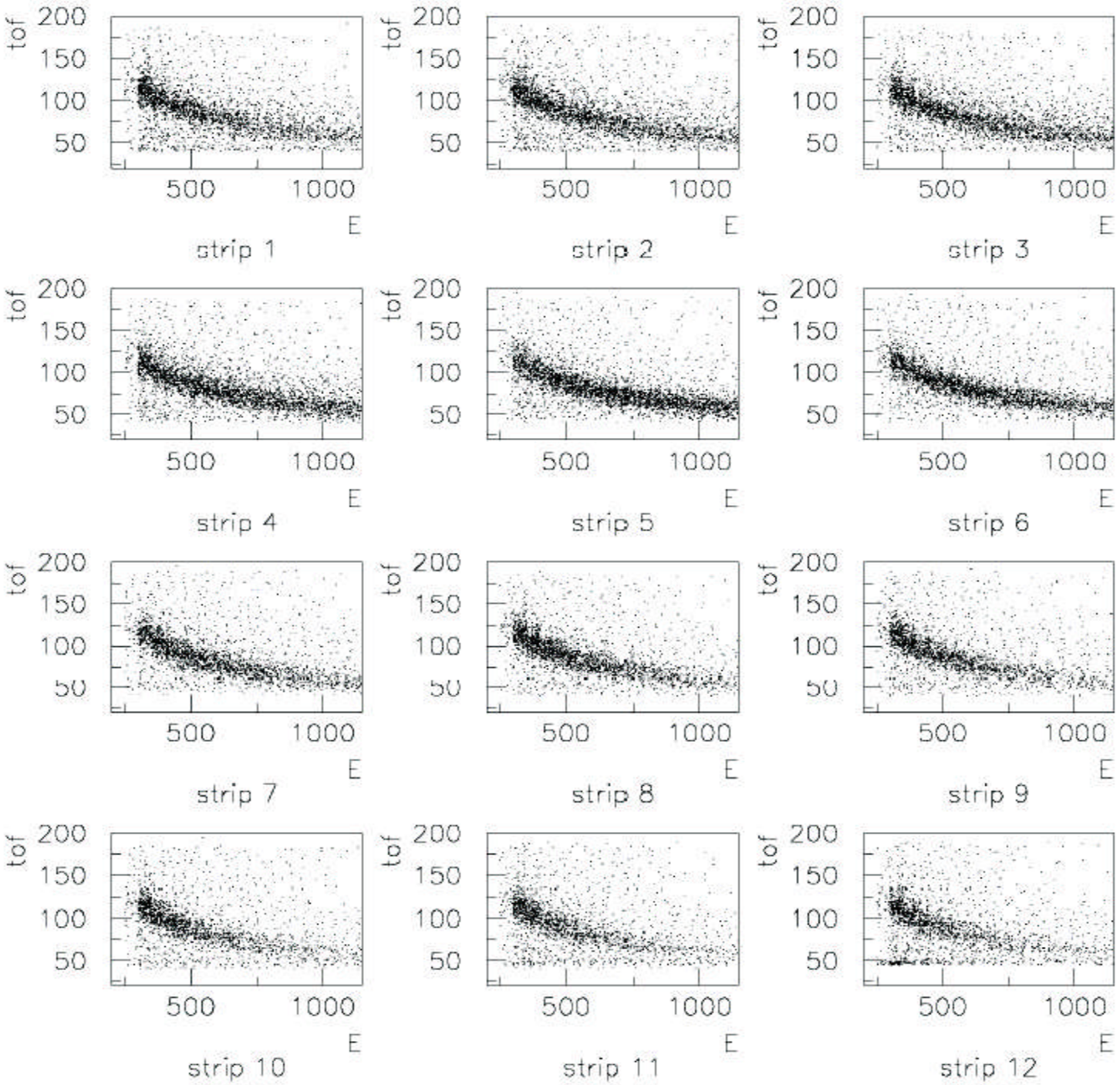
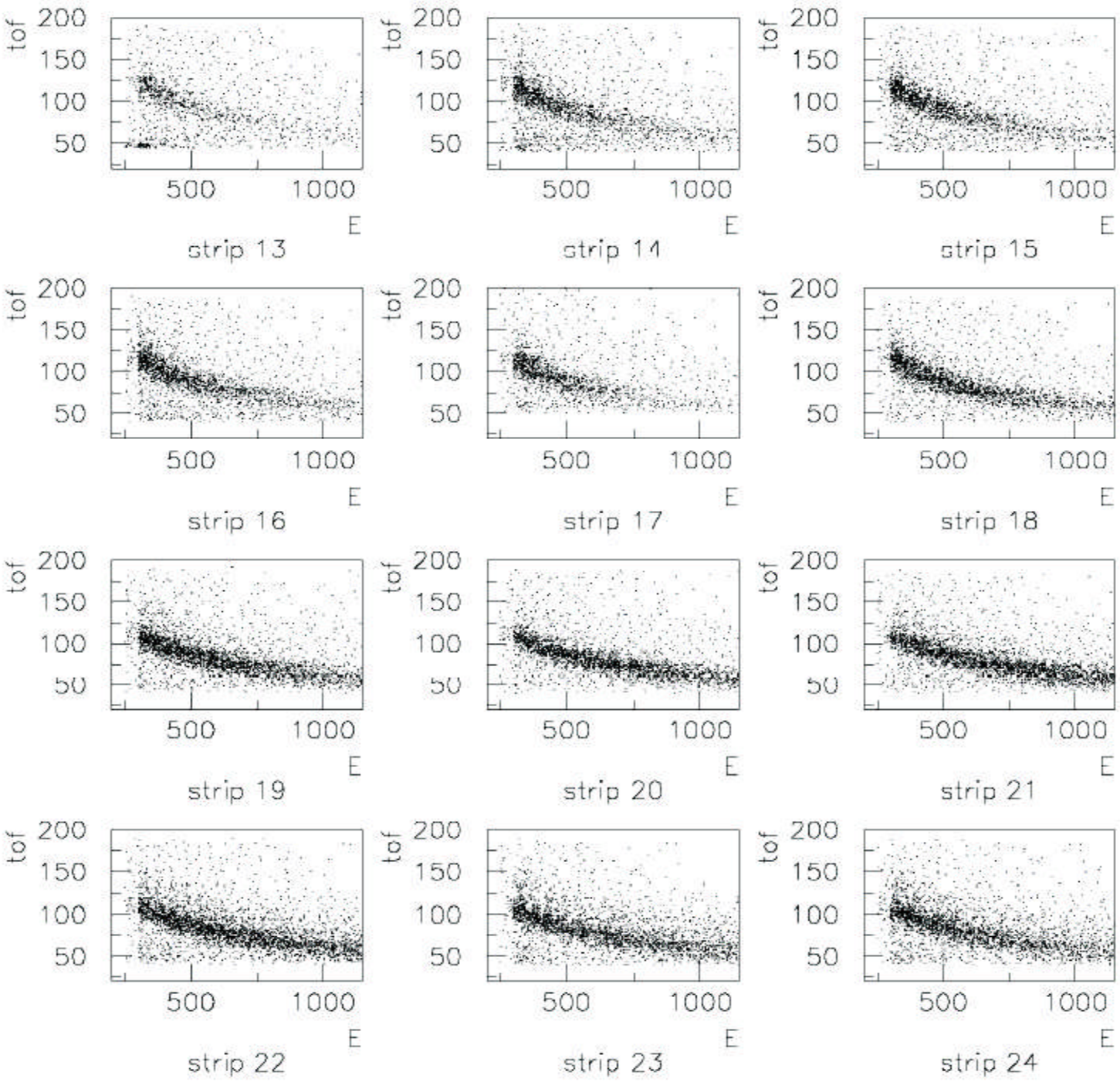
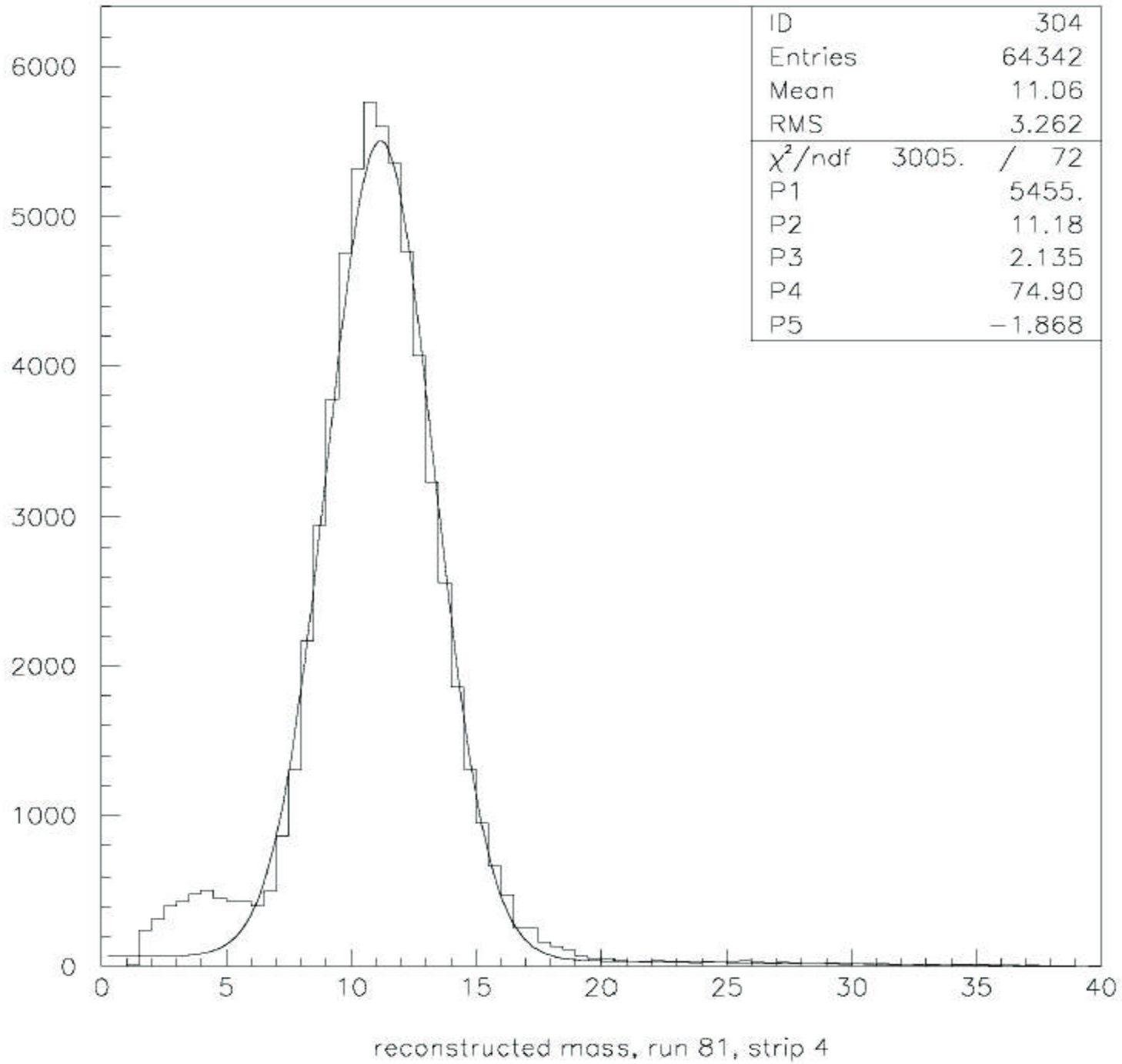
CNI Polarimeter Status Report

1. A look at the data
2. Problem with timing algorithm
3. Plans

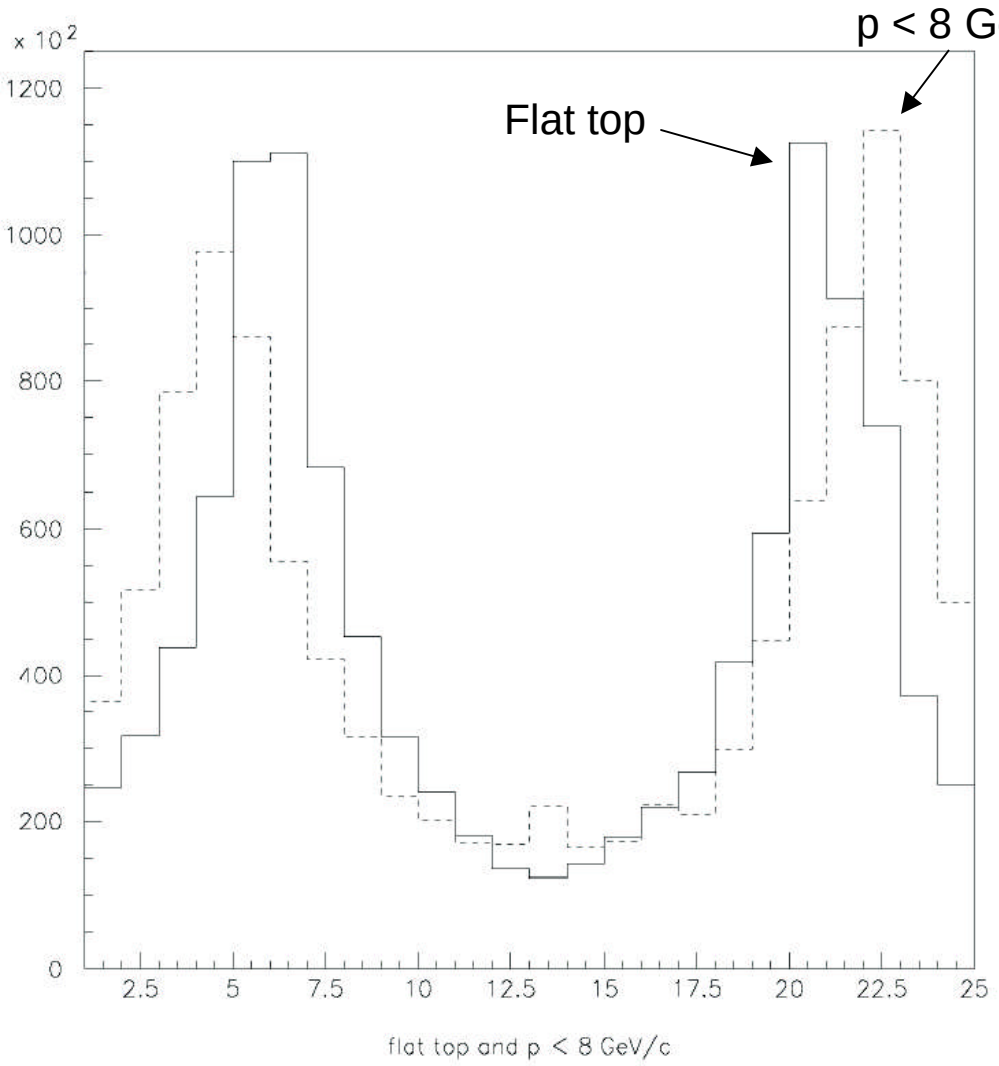
Jeff Wood, UCLA

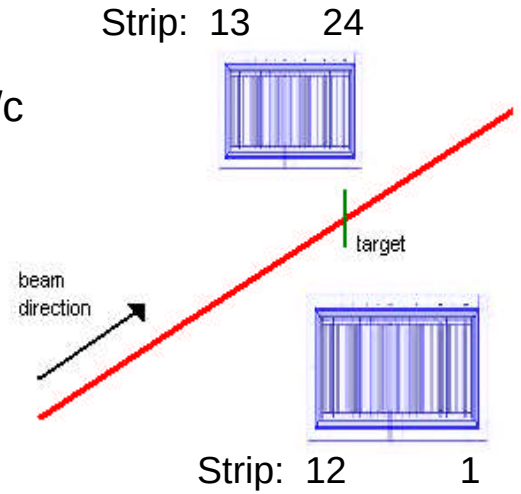

tof
200
150
100
50
500
1000
E
strip 1
strip 2
strip 3
strip 4
strip 5
strip 6
strip 7
strip 8
strip 9
strip 10
strip 11
strip 12


tof
200
150
100
50
500
1000
E
strip 13
strip 14
strip 15
strip 16
strip 17
strip 18
strip 19
strip 20
strip 21
strip 22
strip 23
strip 24


ID 304
Entries 64342
Mean 11.06
RMS 3.262
χ²/ndf 3005. / 72
P1 5455.
P2 11.18
P3 2.135
P4 74.90
P5 −1.868
6000
5000
4000
3000
2000
1000
0
0
5
10
15
20
25
30
35
40
reconstructed mass, run 81, strip 4

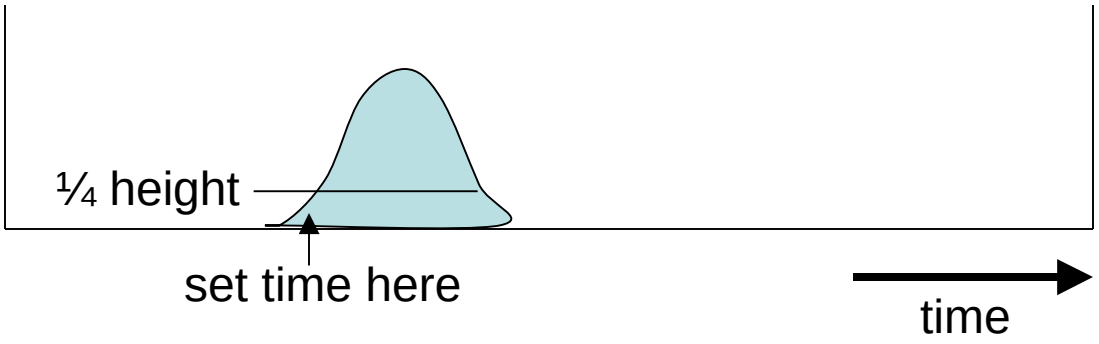
strip distribution



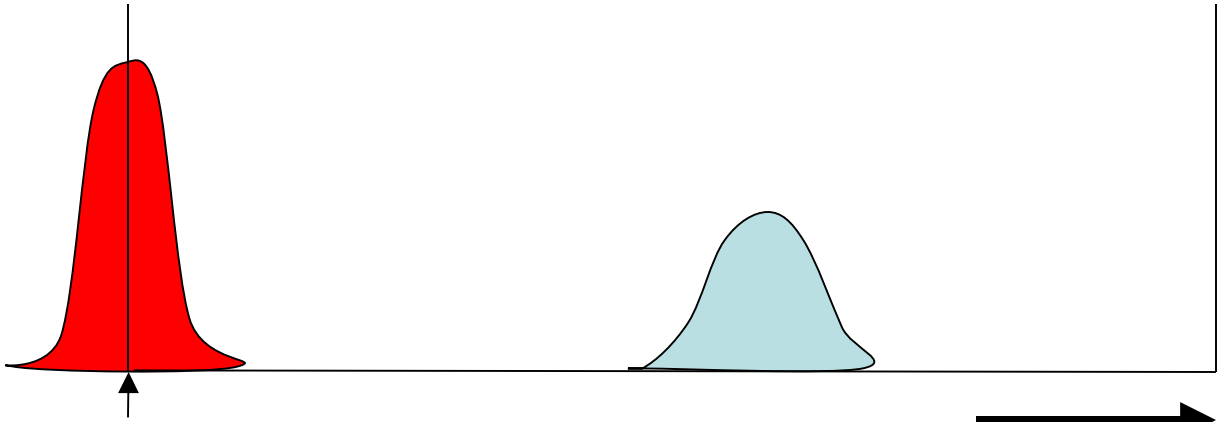


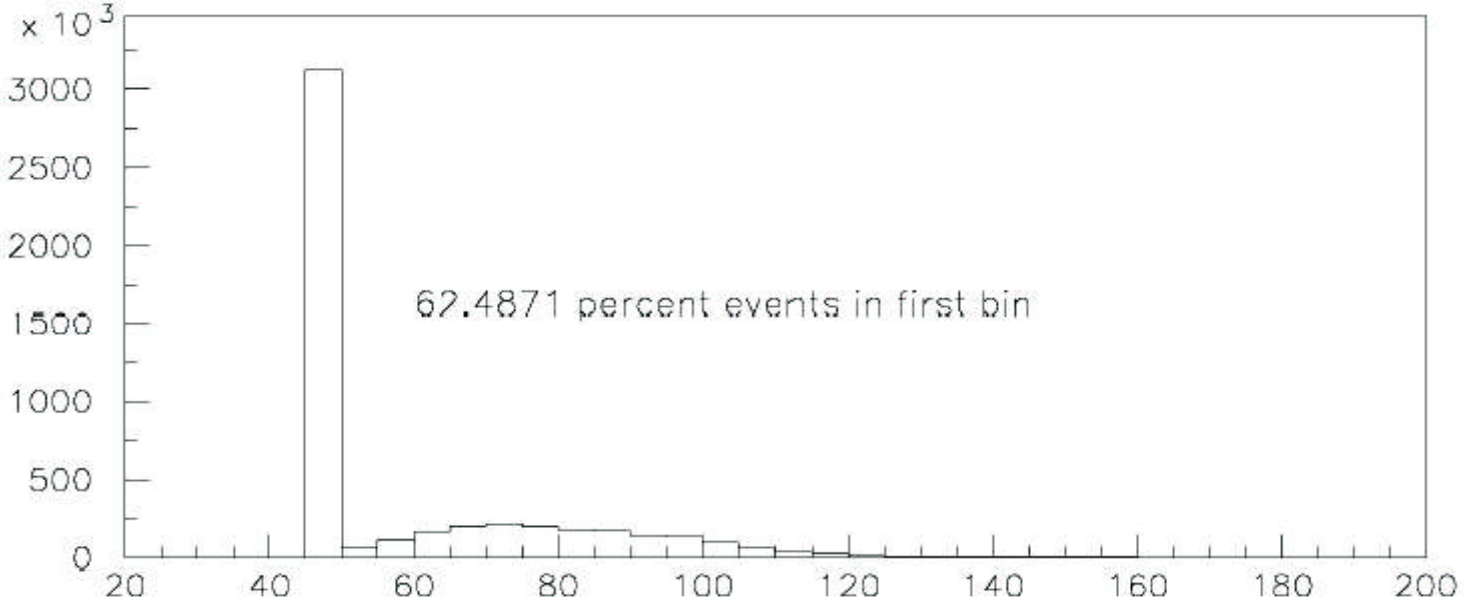
timing algorithm

- find peak in sensitive time window
- look for ¼ peak at an earlier time

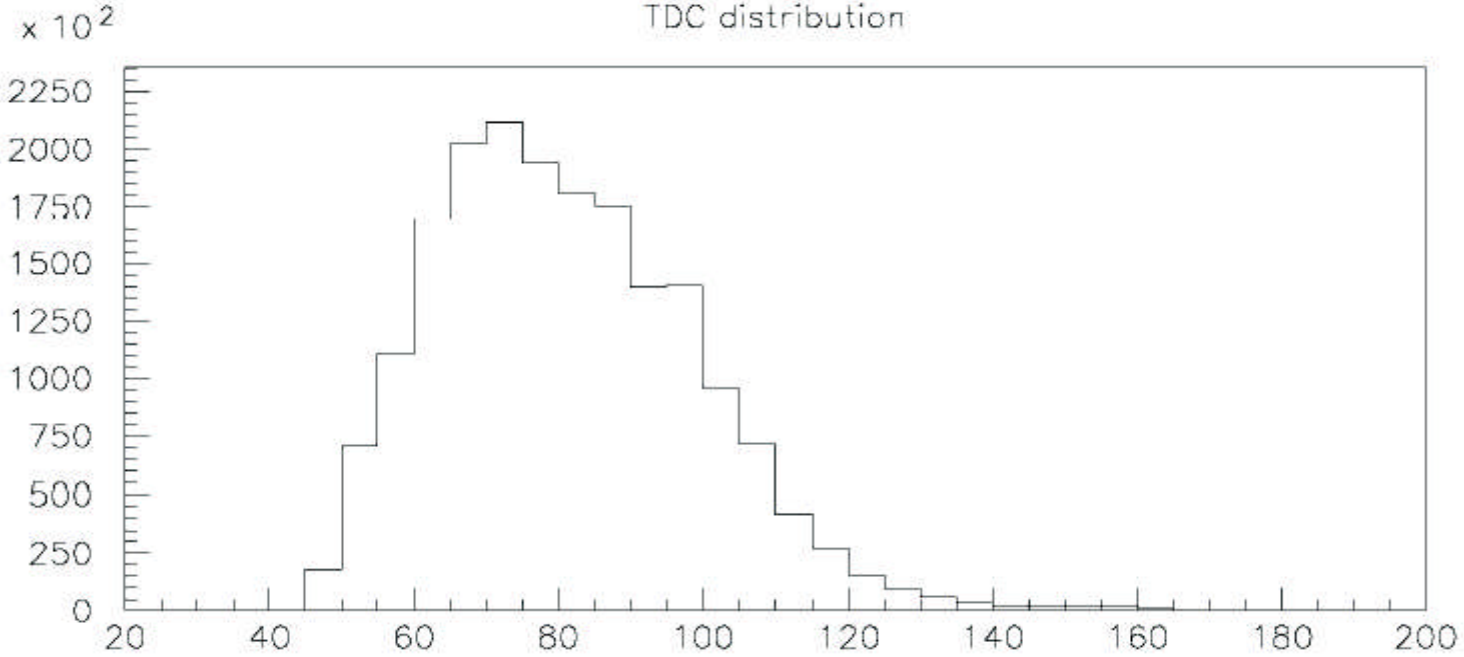


- Problem: pick up prompt background signal





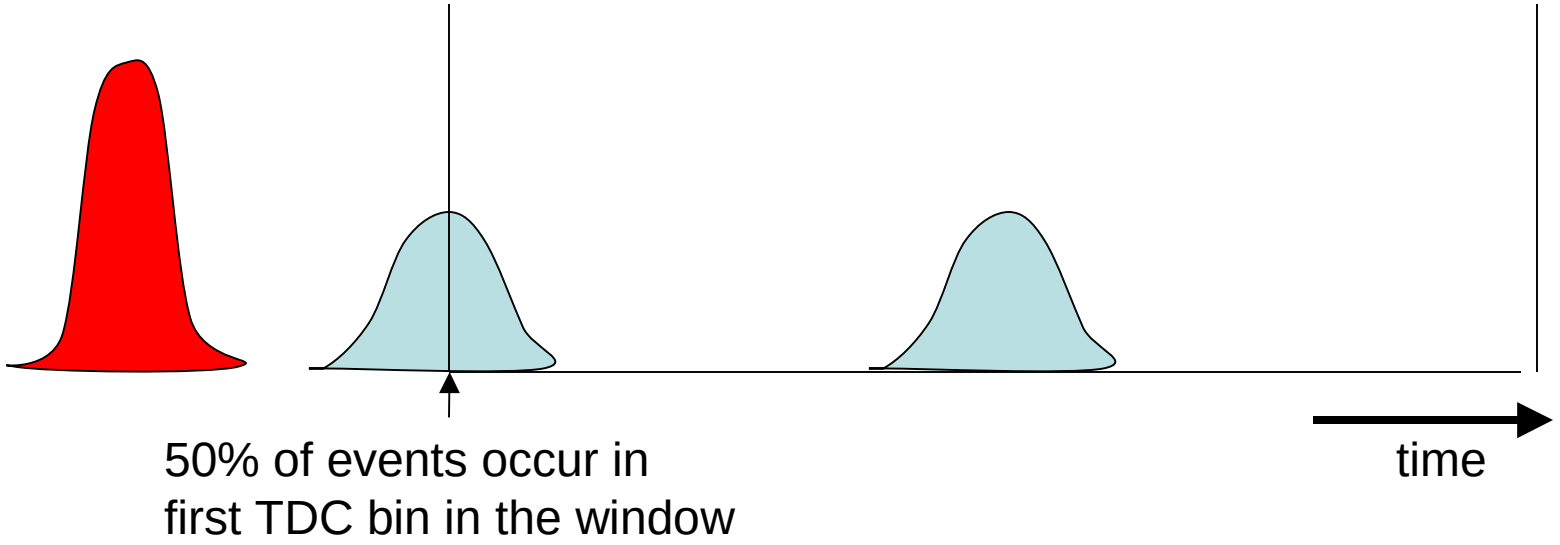
TDC distribution



TDC distribution, cut TDC > 48

Temporary solution

- shift time window
- but still find wrong time for half events



- throw away half events that we record
- need to reprogram algorithm in WFDs

Plan for near future

- Need to change timing algorithm
  - Dima and Igor's next visit
- Would like to try a flat top asymmetry measurement
  - Keep in contact with MCR for available beam