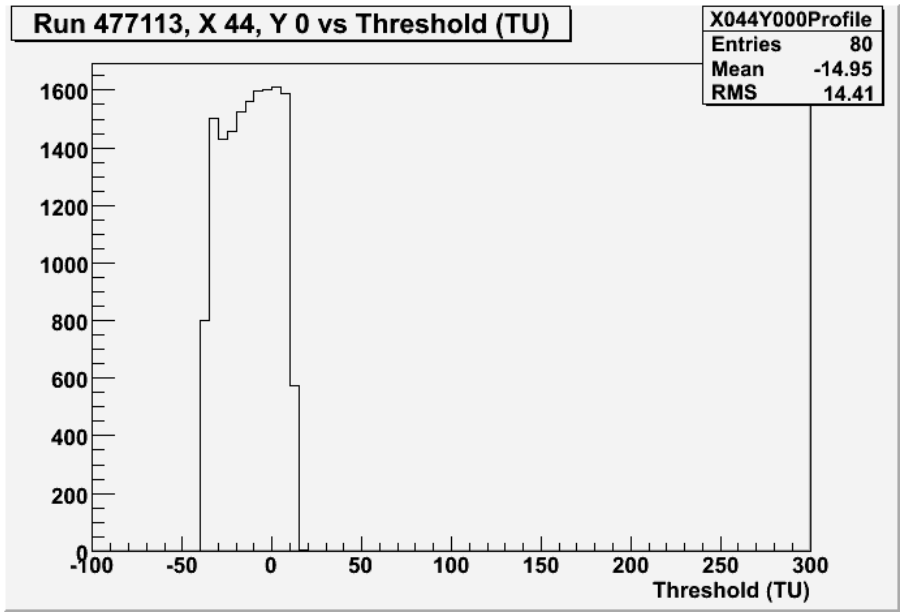
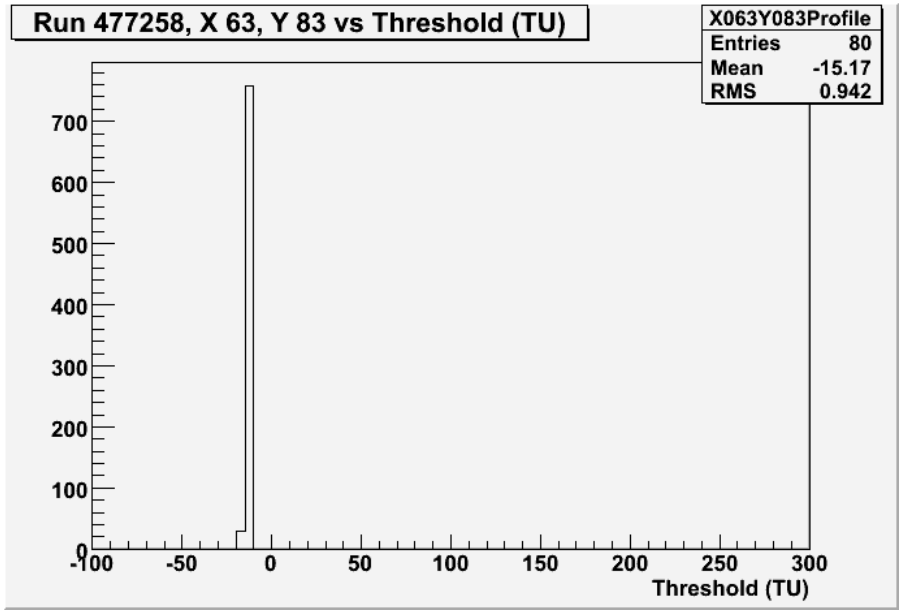
Tests on TPAC1.1

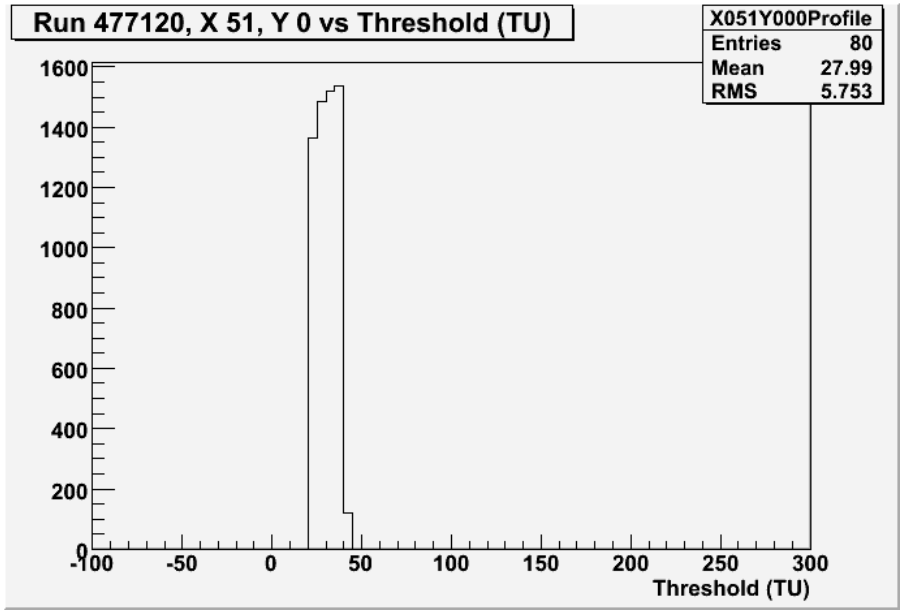
Paul Dauncey

Pedestal/noise threshold scans

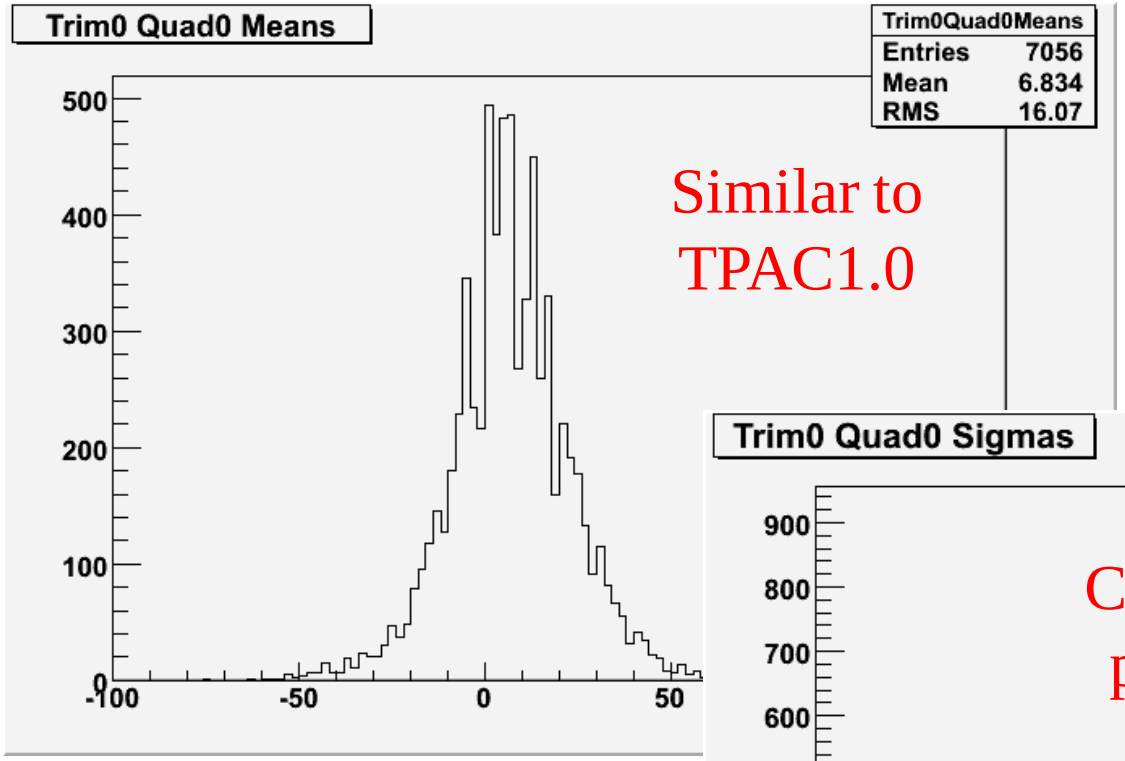
- Noise level varies significantly between pixels



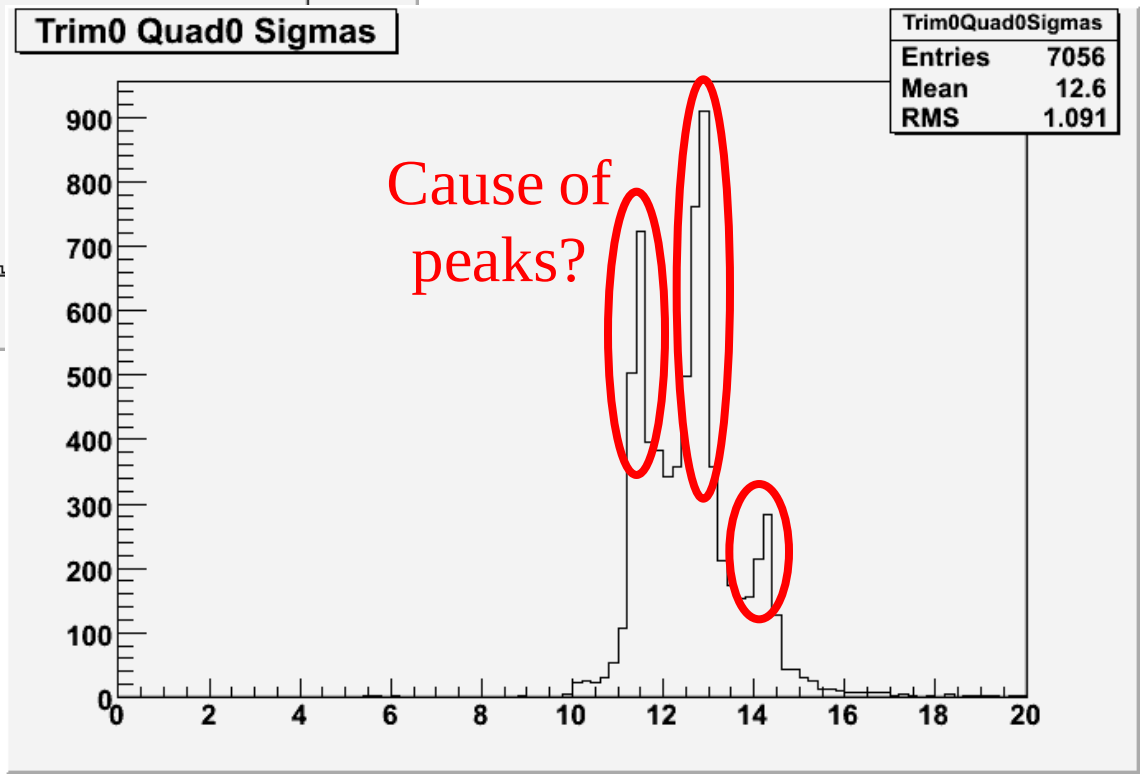




Pedestal and noise distributions

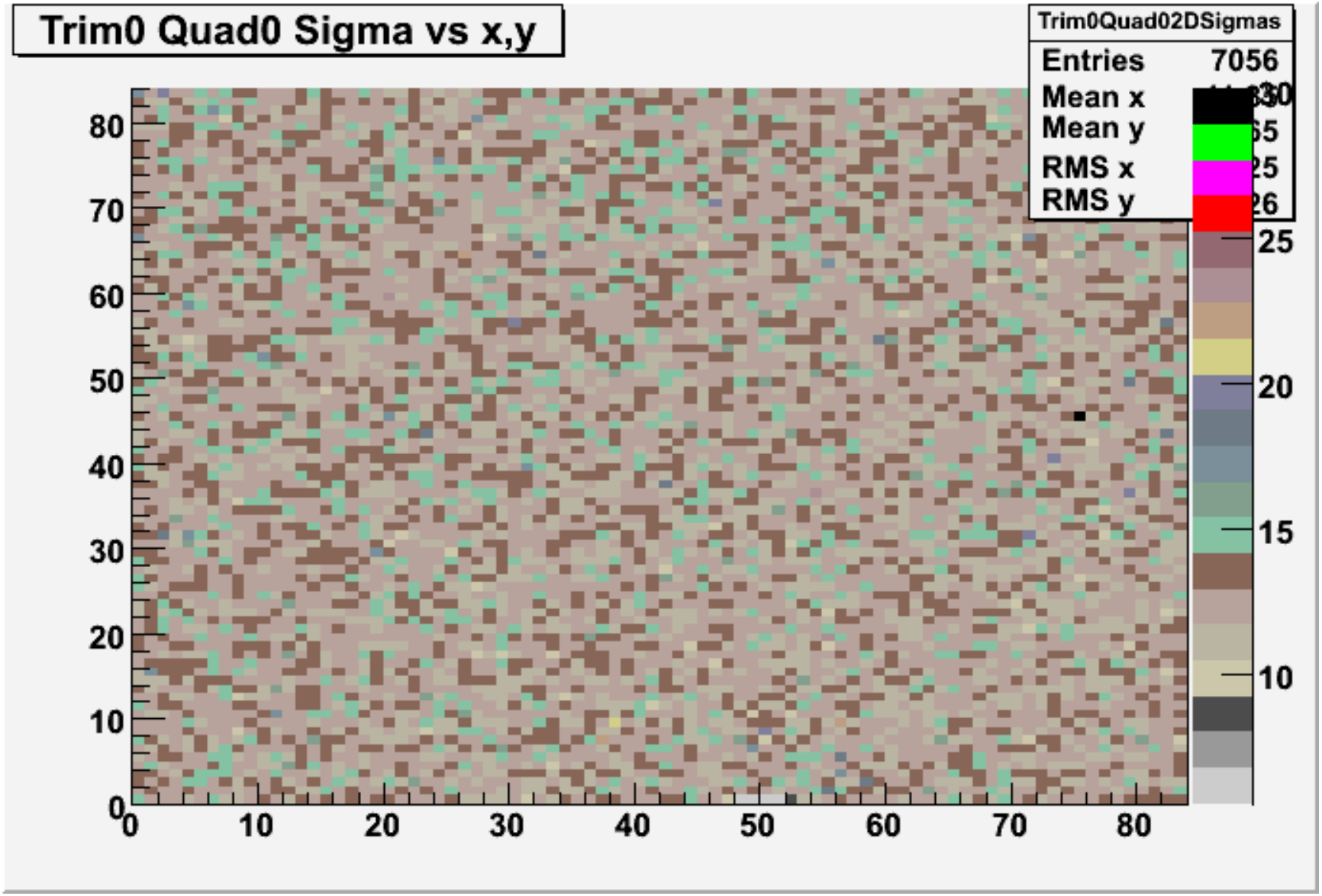


Similar to TPAC1.0

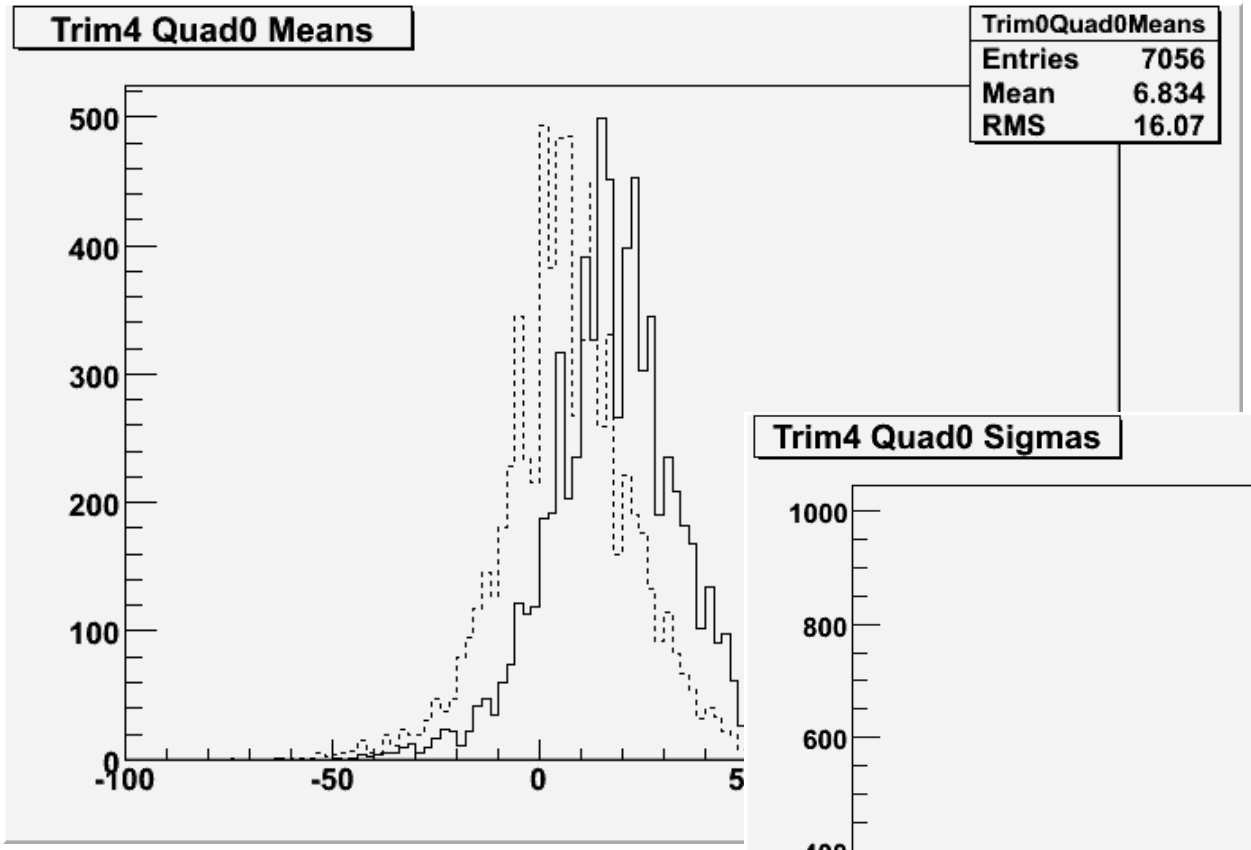


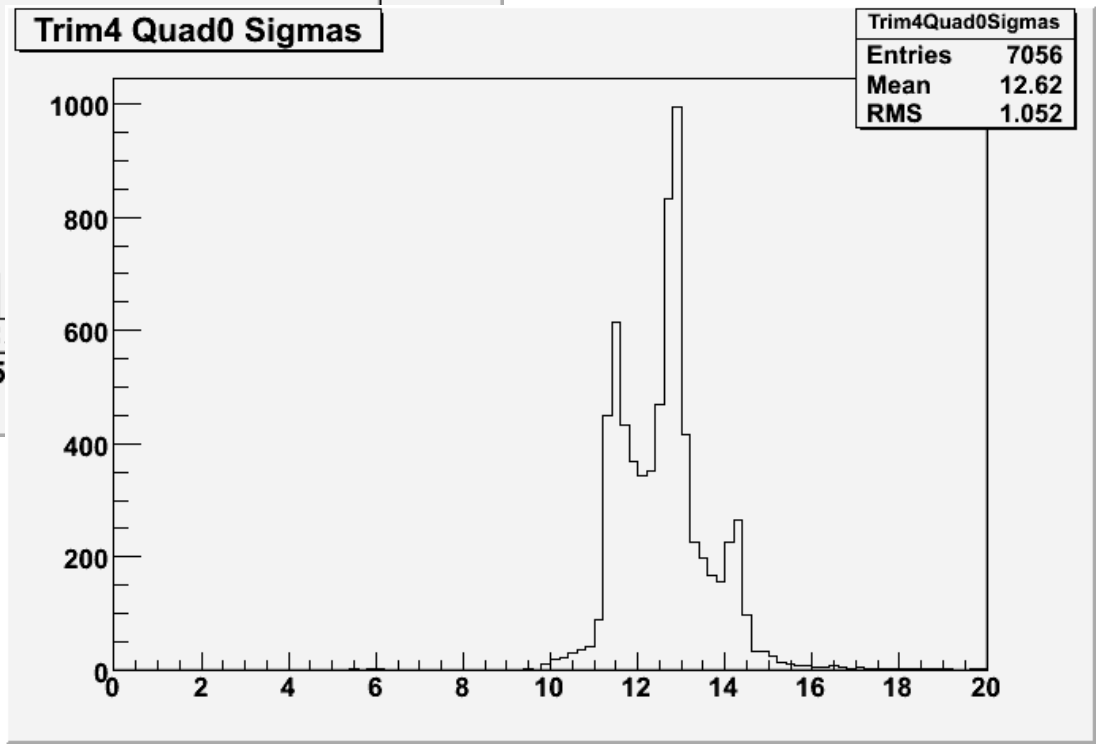
Cause of peaks?

Noise map

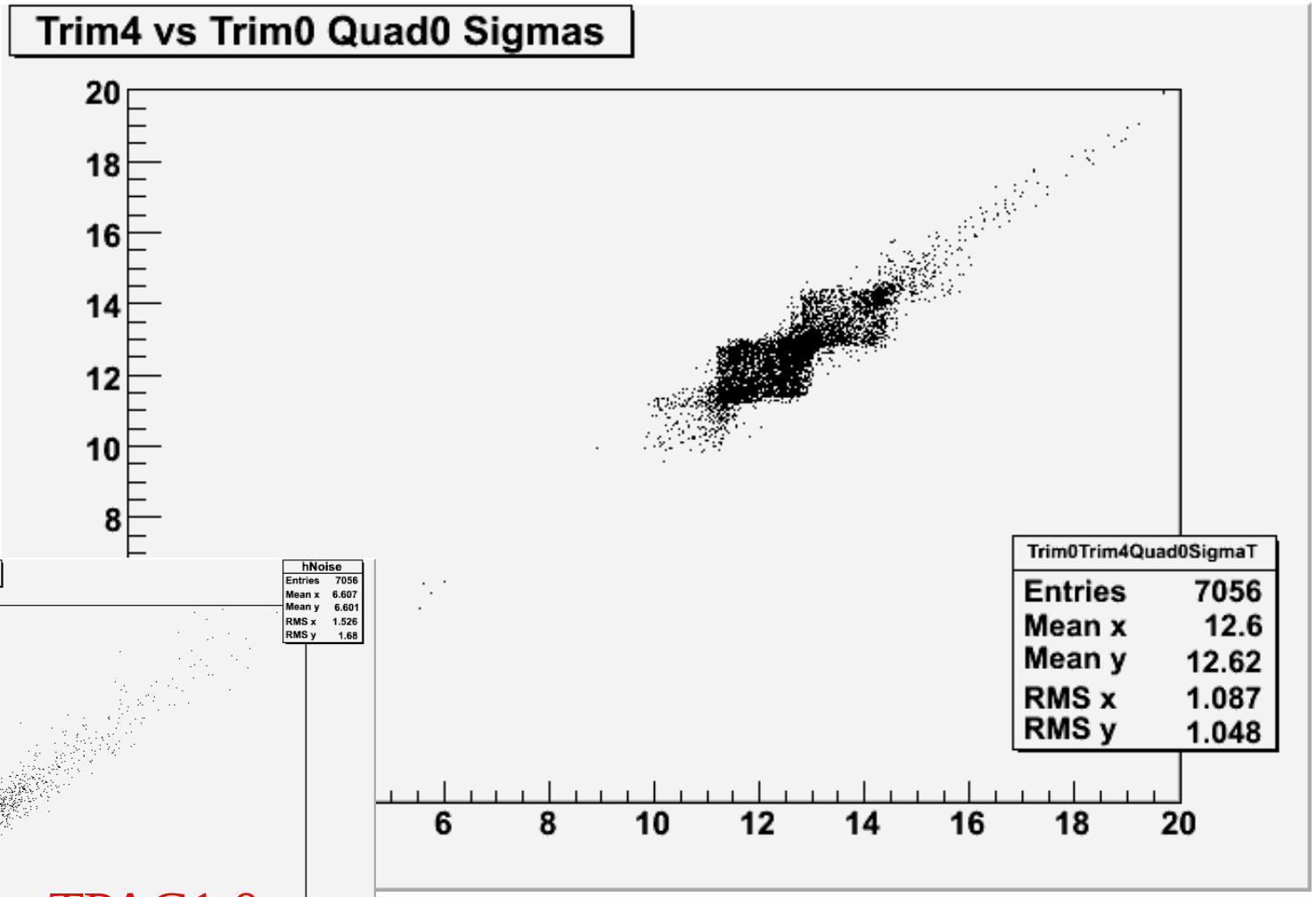

Trim0 Quad0 Sigma vs x,y
Trim0Quad02DSigmas
Entries 7056
Mean x
Mean y
RMS x
RMS y
0
10
20
30
40
50
60
70
80
25
20
15
10

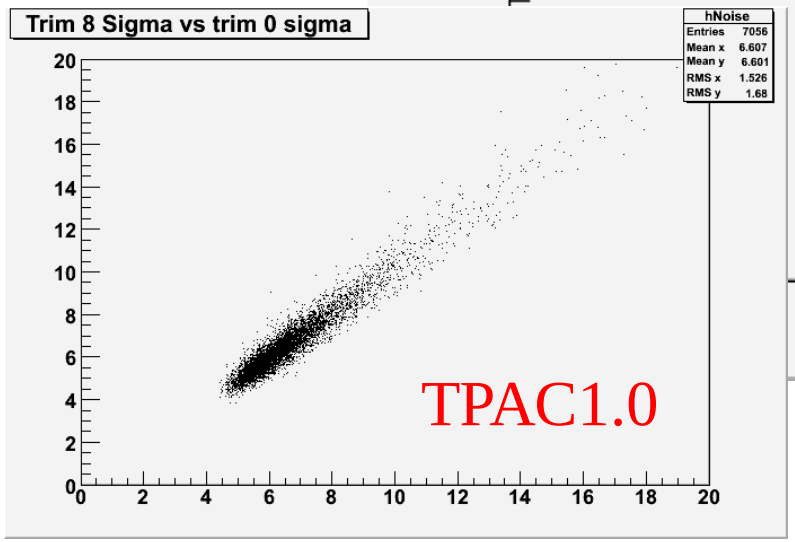
Trim = 4


Trim4 Quad0 Means
Trim0Quad0Means
Entries 7056
Mean 6.834
RMS 16.07
500
400
300
200
100
0
-100
-50
0
5


Trim4 Quad0 Sigmas
Trim4Quad0Sigmas
Entries 7056
Mean 12.62
RMS 1.052
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
18
20

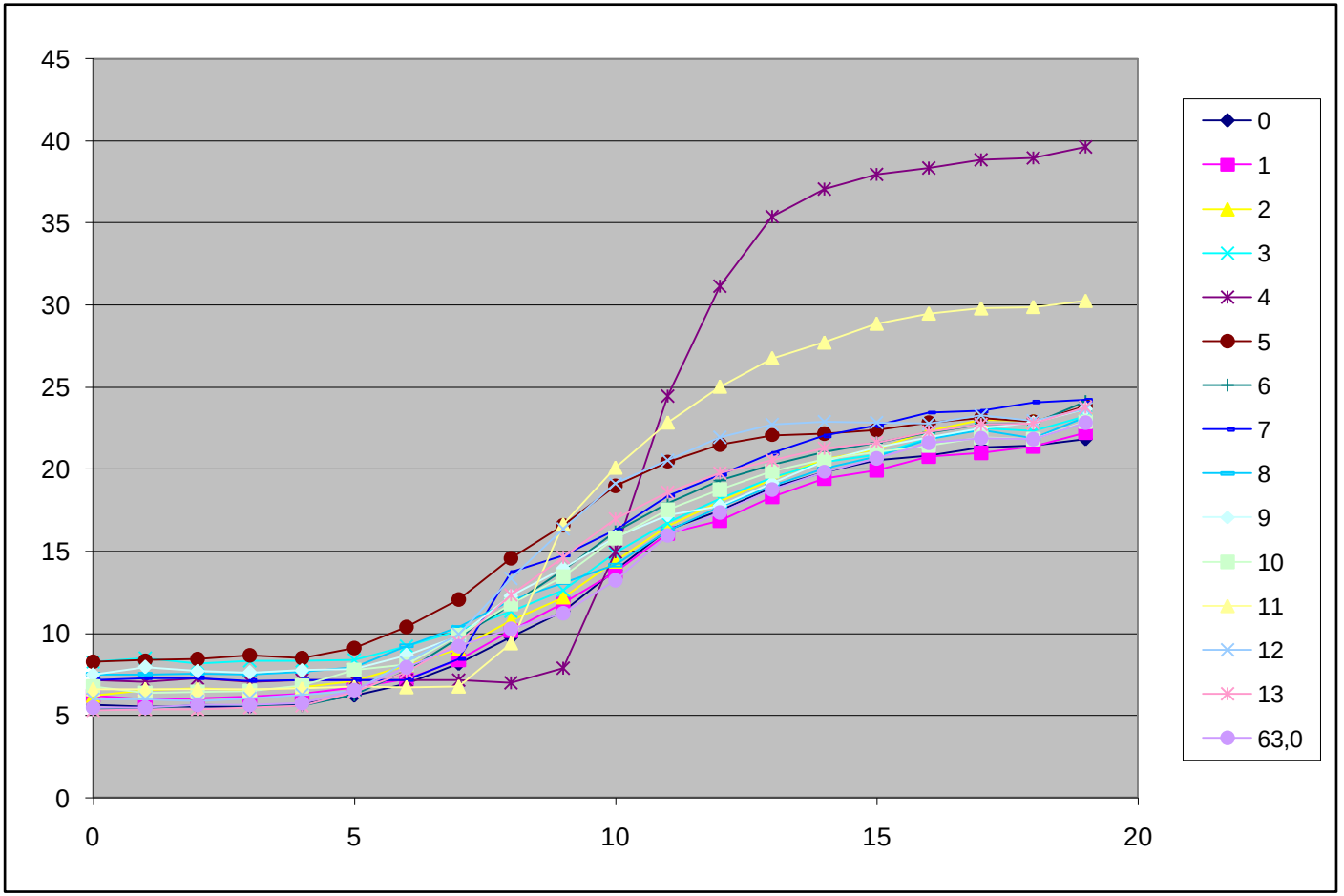
Compare noise values





Pickup on TPAC1.0

- Turn on rows of 42 pixels in turn
  - Check on noise as a function of multiple of 42 pixels enabled



Pickup still present on TPAC1.1

- Note expanded x axis scale
  - Effect mitigated but not removed