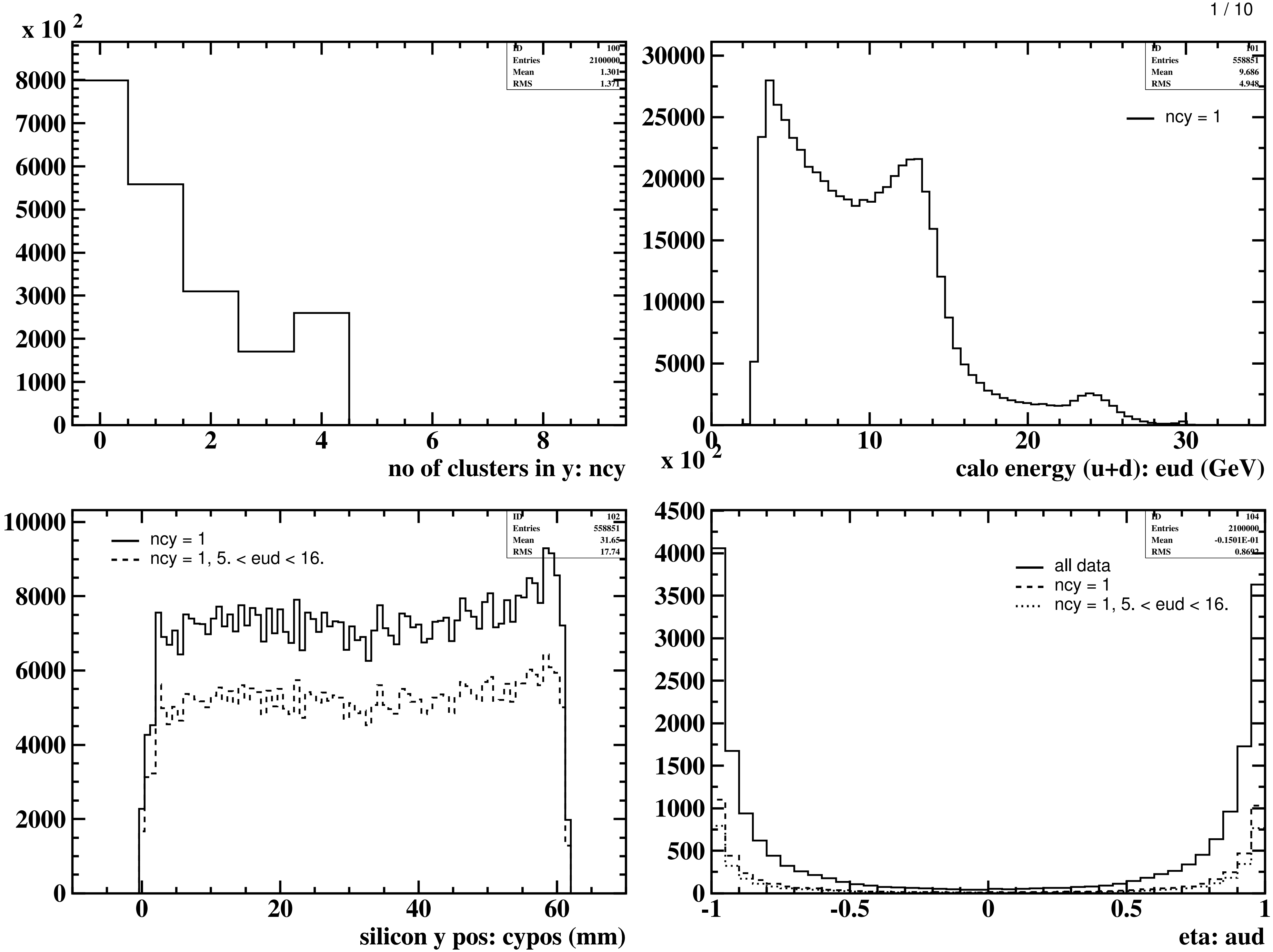
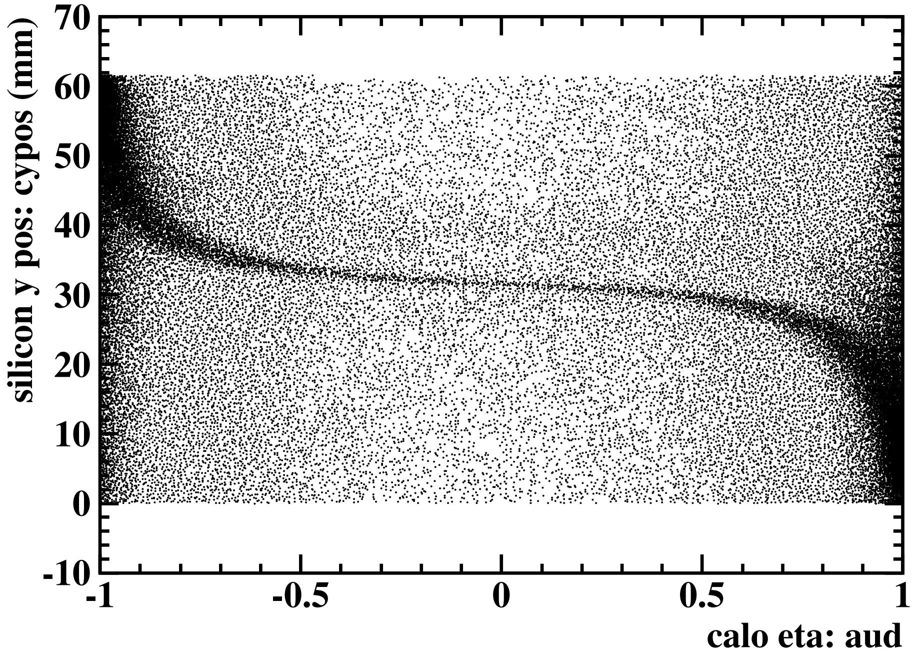

x 10 2
ID 100
Entries 2100000
Mean 1.301
RMS 1.371
no of clusters in y: ncy
ID 101
Entries 558851
Mean 9.686
RMS 4.948
ncy = 1
calo energy (u+d): eud (GeV)
ID 102
Entries 558851
Mean 31.65
RMS 17.74
ncy = 1
ncy = 1, 5. < eud < 16.
silicon y pos: cypos (mm)
x 10 2
ID 104
Entries 2100000
Mean -0.1501E-01
RMS 0.8692
all data
ncy = 1
ncy = 1, 5. < eud < 16.
eta: aud



Cuts applied: - ncy = 1

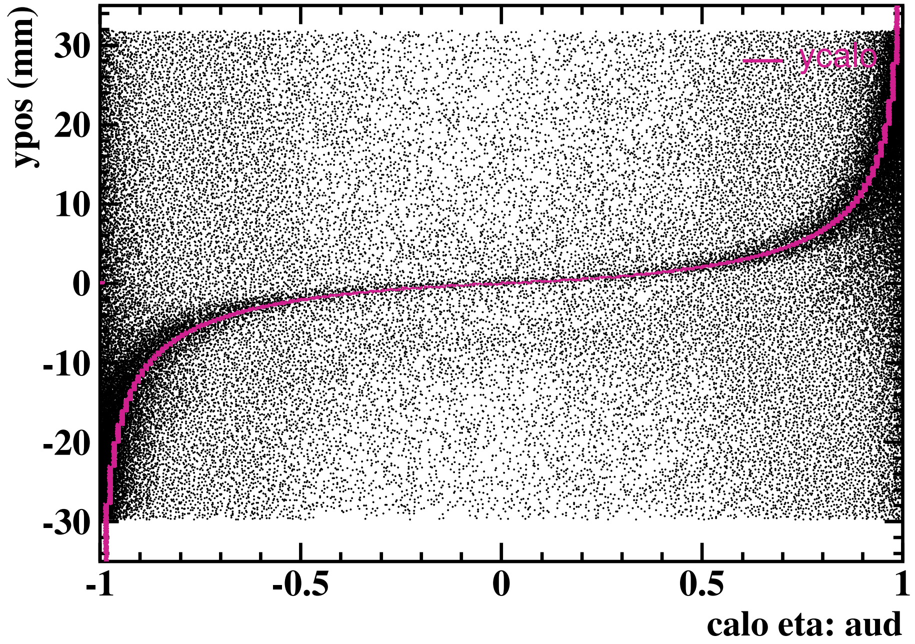
- 5. < eud < 16.

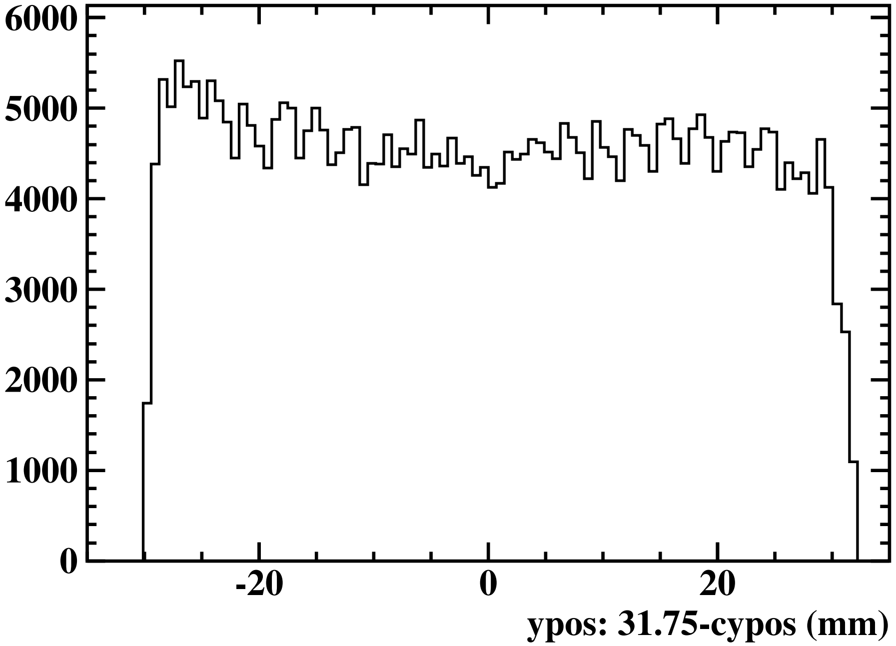
Apply rough position calibration to silicon data:

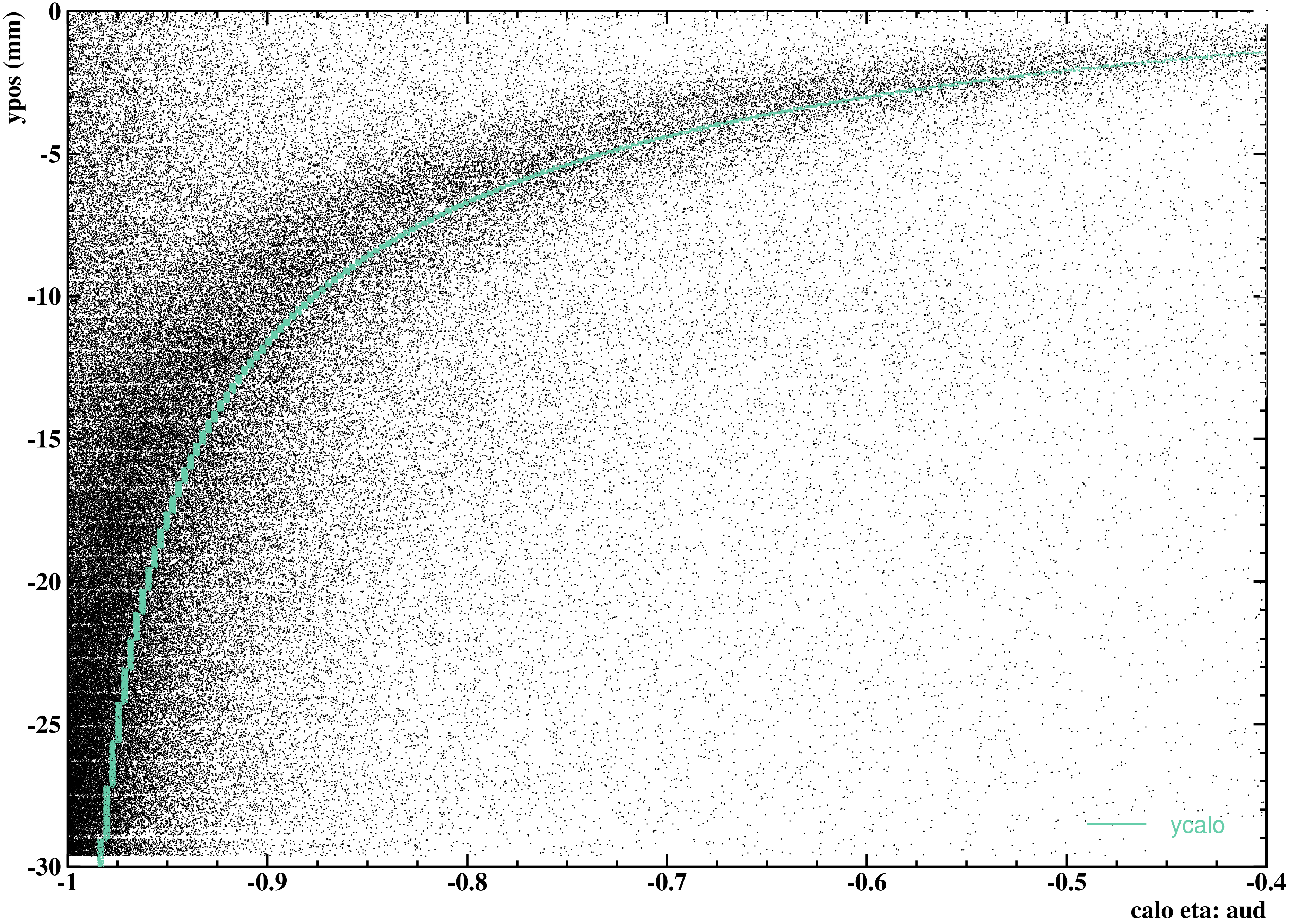
- Center silicon position at 31.75 mm
- Mirror data with respect to new center

$\Rightarrow$ cypos $\rightarrow$ ypos = 31.75 - cypos

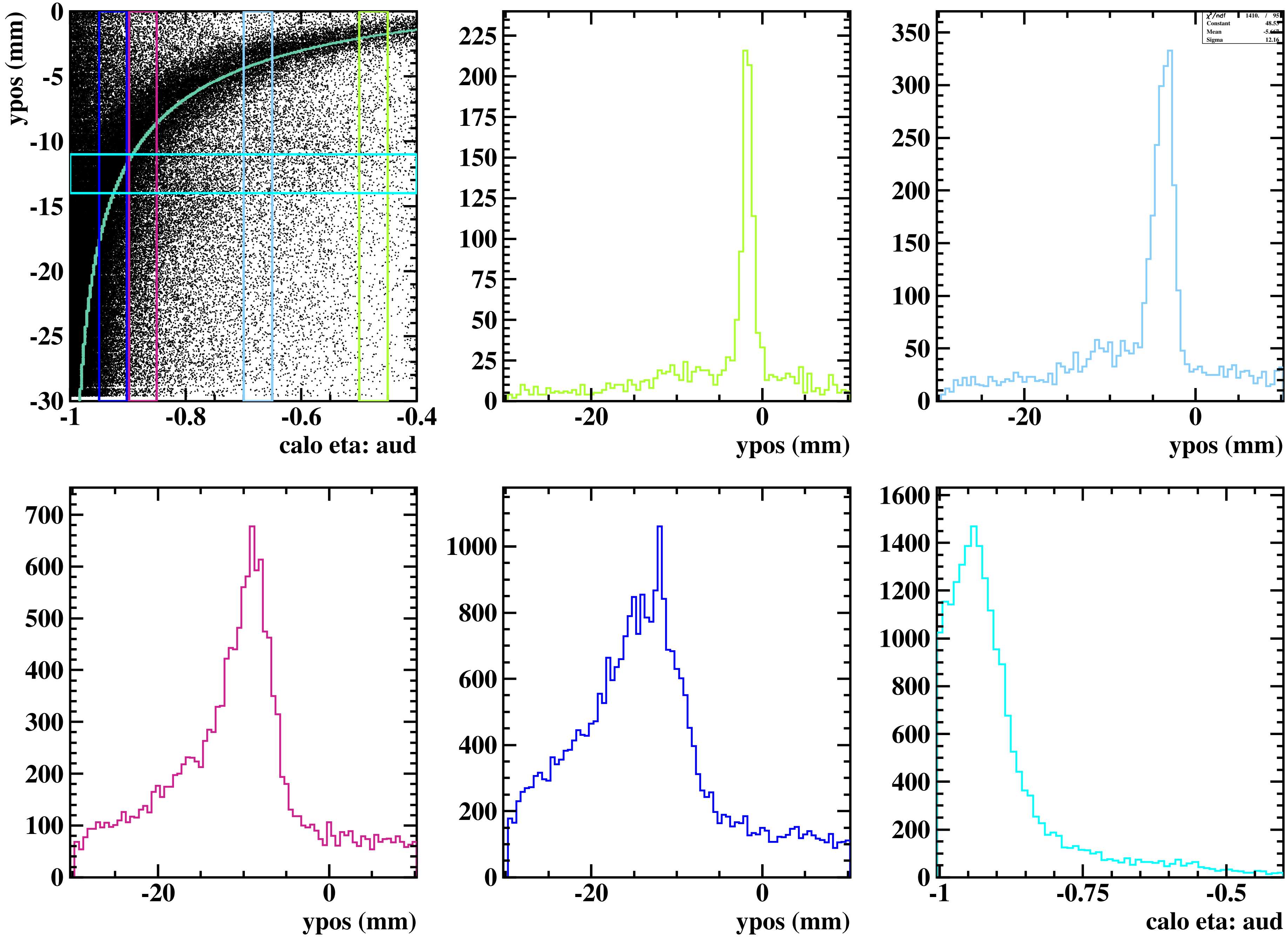
Comparision silicon y position with " ycalo "

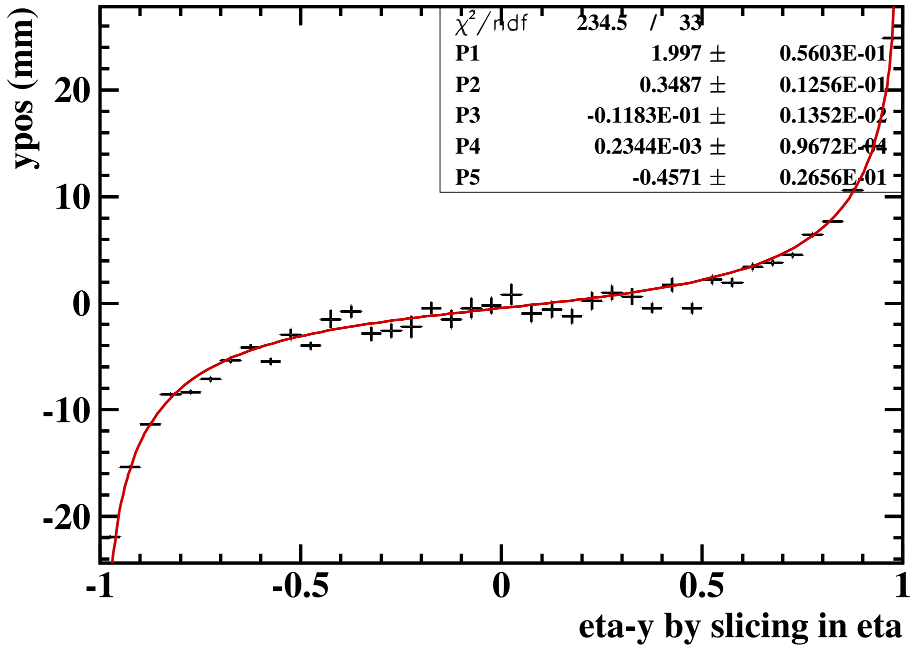






ypos (mm)
0
-5
-10
-15
-20
-25
-30
-1
-0.9
-0.8
-0.7
-0.6
-0.5
-0.4
calo eta: aud
ycalo


ypos (mm)
calo eta: aud
ypos (mm)
ypos (mm)
ypos (mm)
ypos (mm)
calo eta: aud



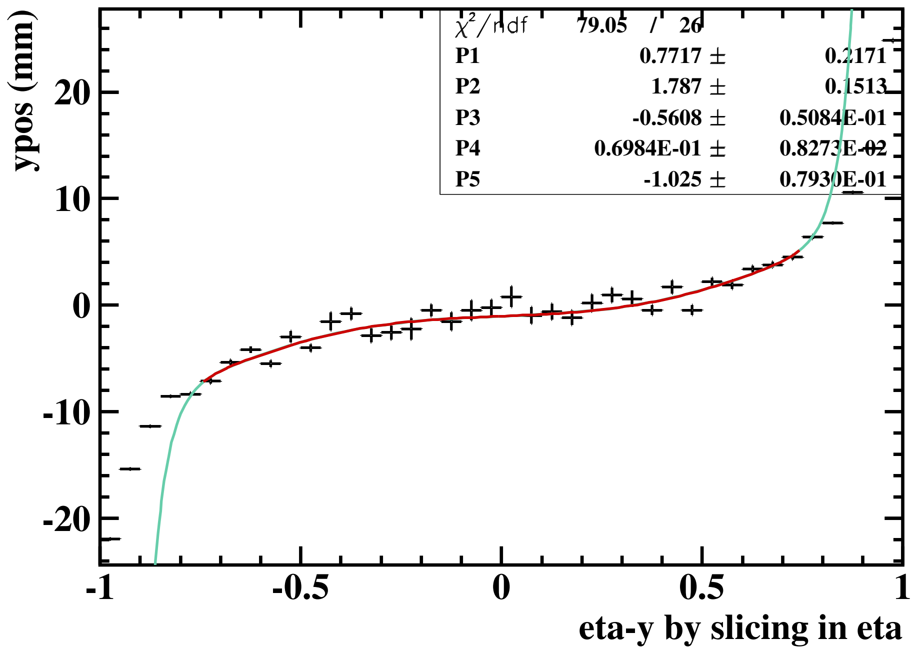
Fitting: 0.05 wide slices in η, fitted with gaussian within ± 2 σ

Error bars: ± 1 σ

Range: $-1. < \eta < 1.$

$F(\eta) = P1 \cdot f(\eta) + P2 \cdot f(\eta)^3 + P3 \cdot f(\eta)^5 + P4 \cdot f(\eta)^7 + P5$

$f(\eta) = \log((1+\eta)/(1-\eta))$

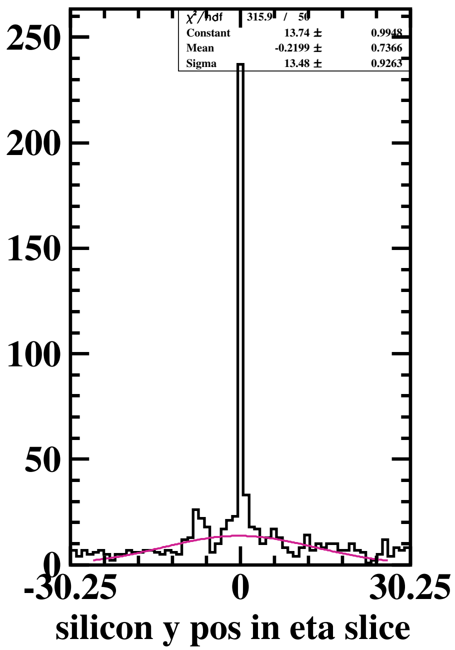


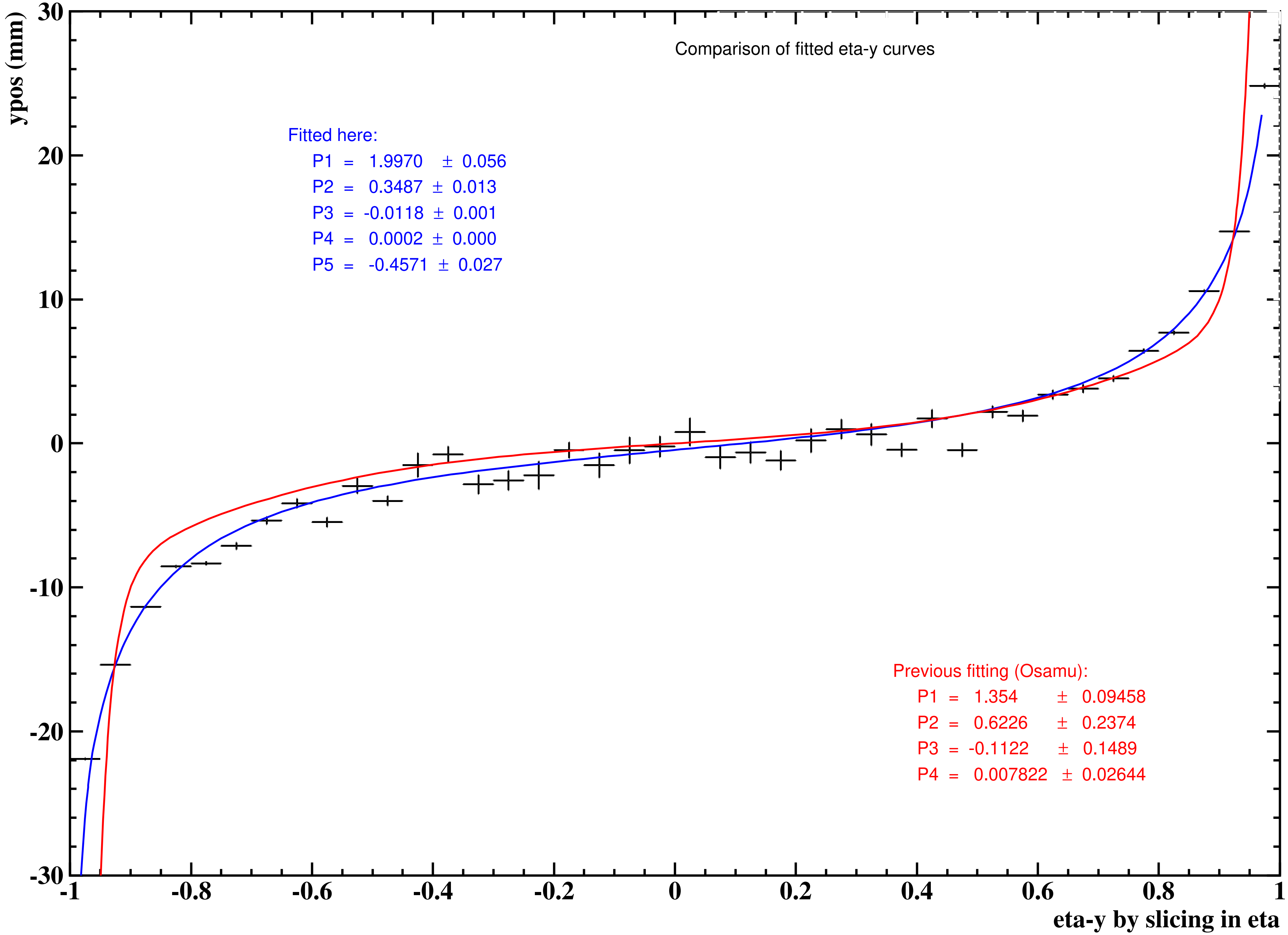
Fitting:

Error bars: ± 1 σ

Range: $-0.75 < \eta < 0.75$

Why large error bars for small $|\eta|$?





Comparison of fitted eta-y curves
ypos (mm)
eta-y by slicing in eta
Fitted here:
P1 = 1.9970 ± 0.056
P2 = 0.3487 ± 0.013
P3 = -0.0118 ± 0.001
P4 = 0.0002 ± 0.000
P5 = -0.4571 ± 0.027
Previous fitting (Osamu):
P1 = 1.354 ± 0.09458
P2 = 0.6226 ± 0.2374
P3 = -0.1122 ± 0.1489
P4 = 0.007822 ± 0.02644
30
20
10
0
-10
-20
-30
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1