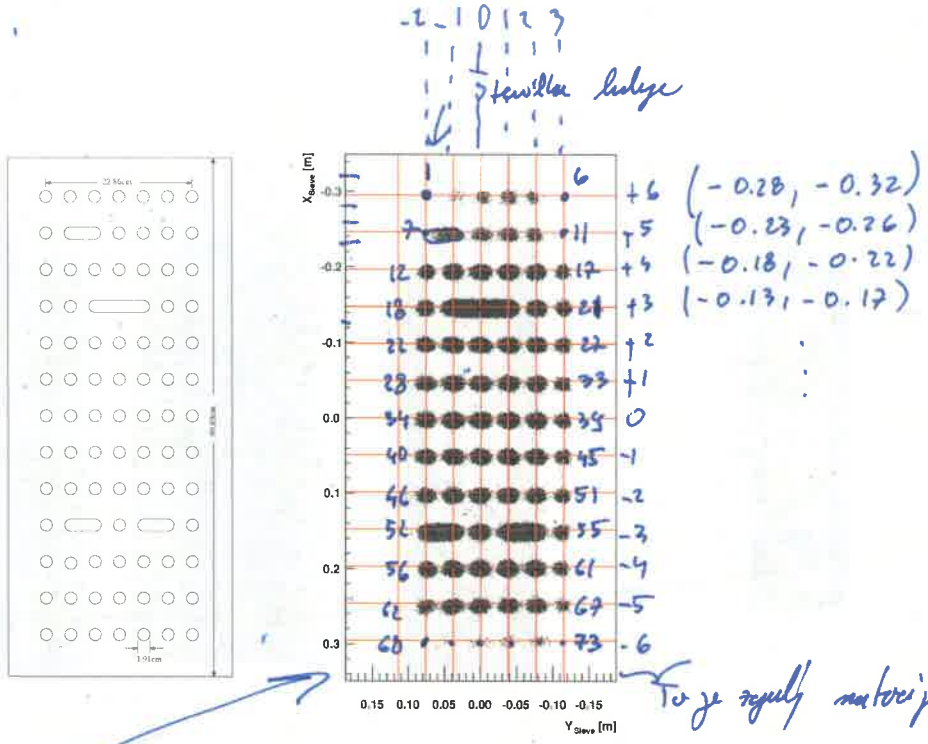
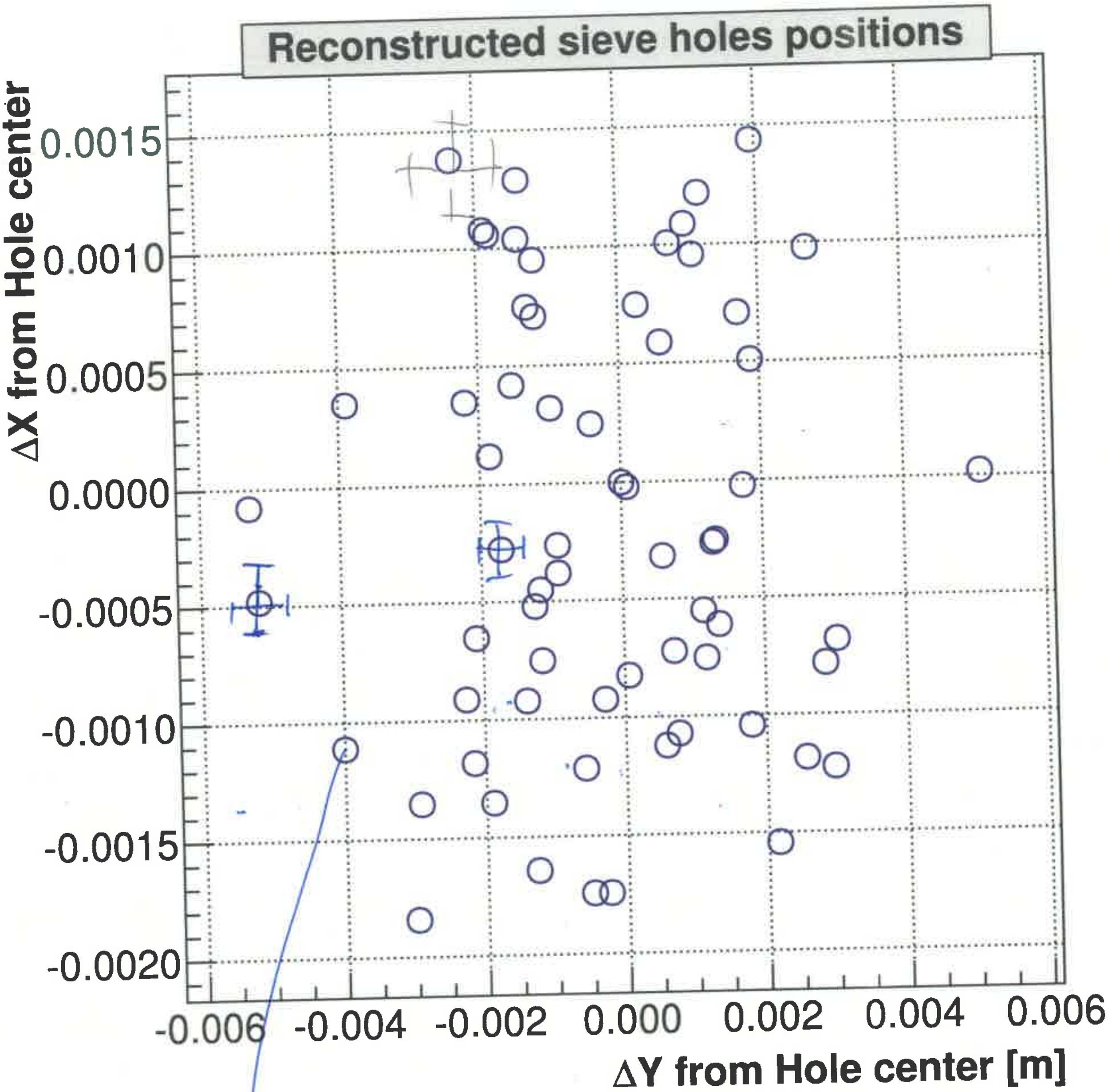


Figure 5: [Left] Schematics of the BigBite sieve-slit collimator. [Right] Reconstructed sieve pattern. The leftmost holes are missing due to geometrical obtacles between the target and BigBite.

Hole #	$\bar{x}_{pos}$ [m]	σ_x [m]	$\bar{y}_{pos}$ [m]	σ_y [m]	Comment
1	/	/	/	/	Mirroring
2	-0.03302	0.009873	0.2954	0.006052	
3	0.00302	0.007347	0.2947	0.006146	
4	0.04066	0.009839	0.2942	0.005605	
5	0.07102	0.005593	0.2949	0.006285	
6	/	/	/	/	Mirroring
7	/	/	/	/	Double hole
8	0.001328	0.007754	0.2459	0.00615	
9	0.03927	0.008332	0.2454	0.005631	
10	0.07327	0.006957	0.2448	0.005881	
11	/	/	/	/	Mirroring
12	-0.07324	0.006724	0.1957	0.005843	
13	-0.03804	0.007171	0.1961	0.005770	
14	-0.0002907	0.007476	0.1960	0.00597	
15	0.03881	0.007324	0.1962	0.005784	



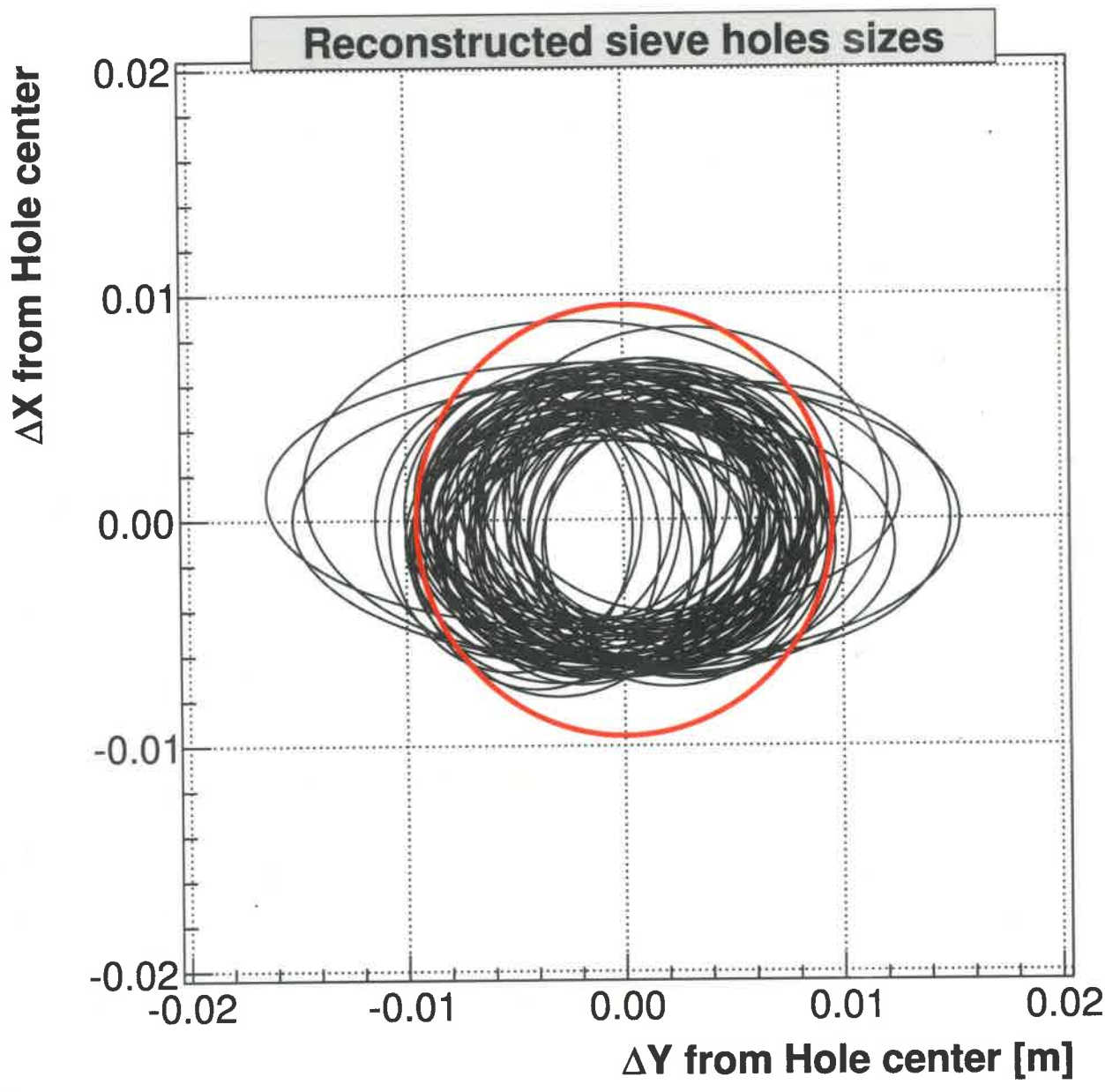
05/05/11 – Nariši povprečne vrednosti in napake

Napake majhne! Ta je še treba pogledati!!!

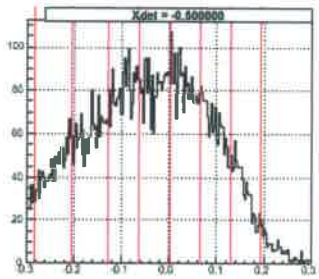
True (Calculated) positions of the Holes.

Difference in Vertical direction is : 1.938 in = 4.923 cm

— " — Horizontal direction is : 1.5 in = 3.81 cm



Old Results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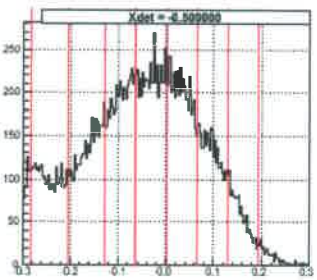
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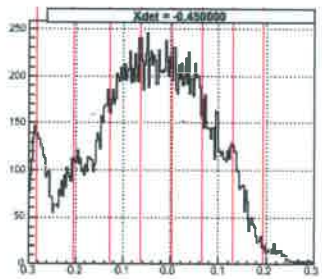
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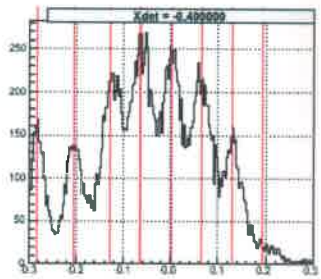
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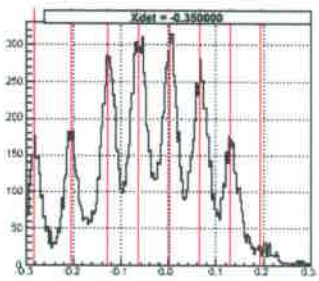
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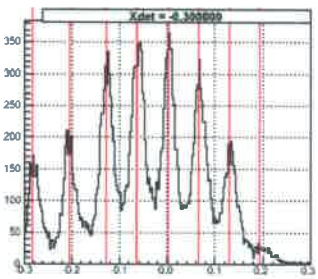
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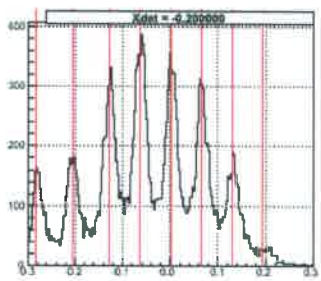
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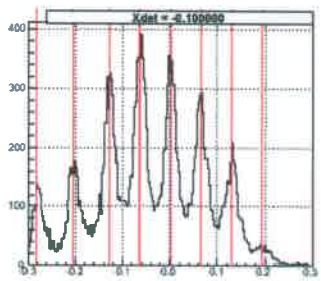
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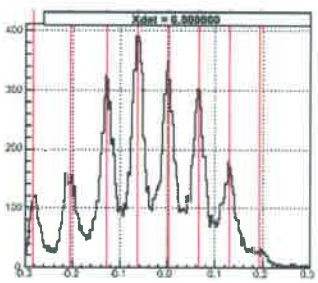
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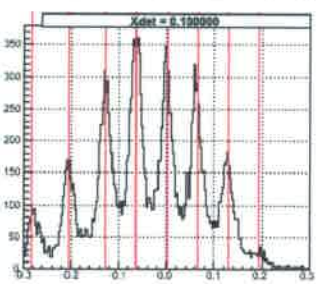
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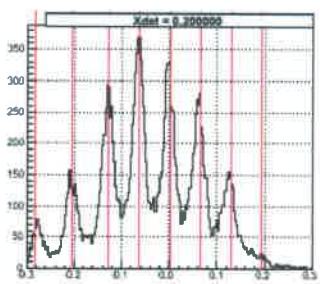
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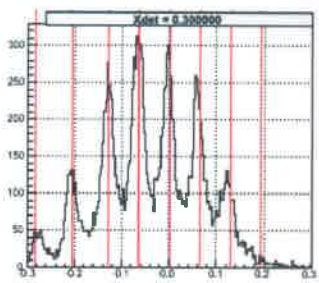
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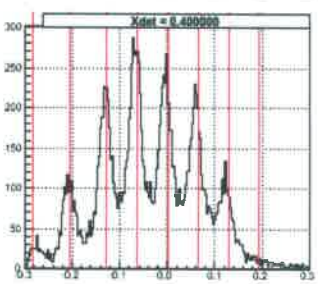
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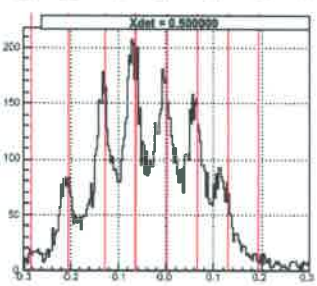
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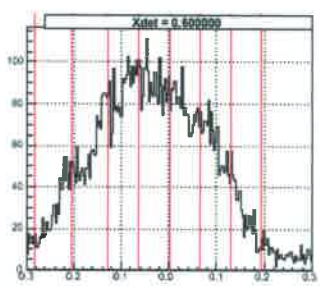
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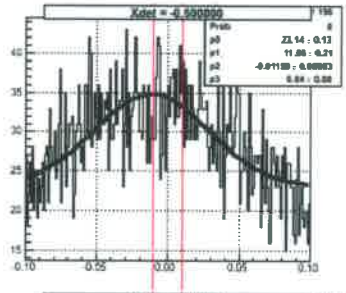
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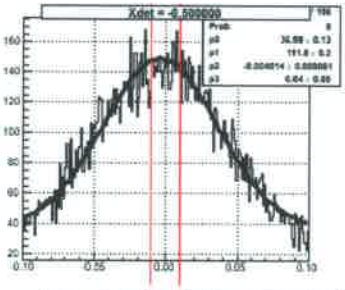
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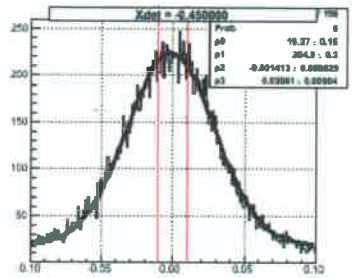
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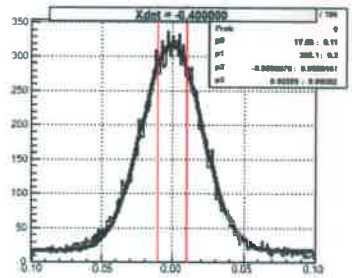
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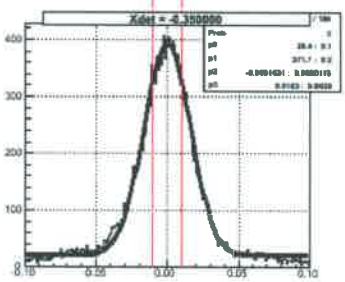
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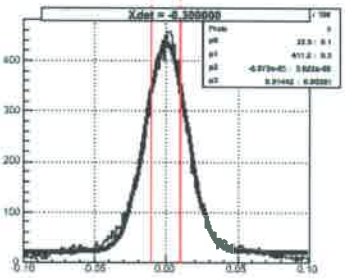
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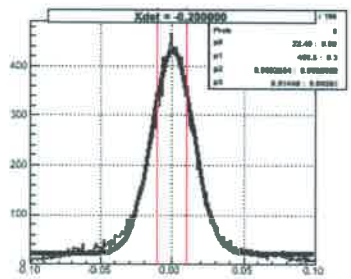
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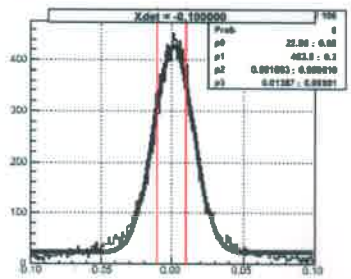
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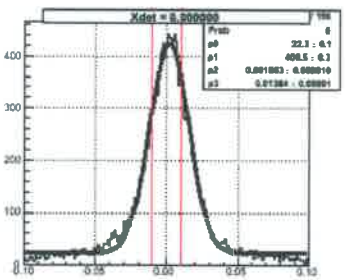
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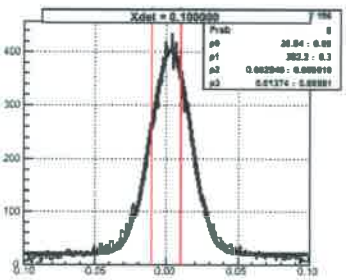
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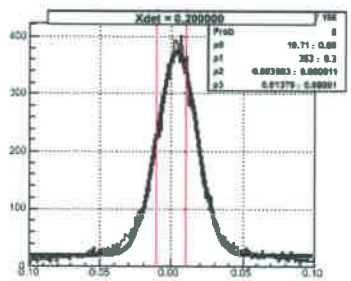
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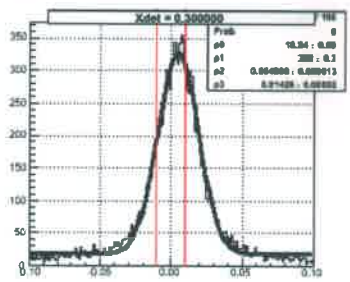
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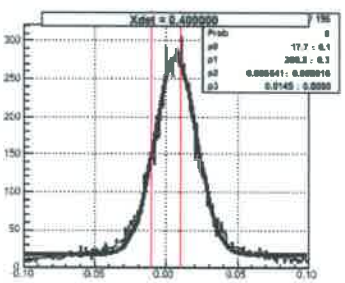
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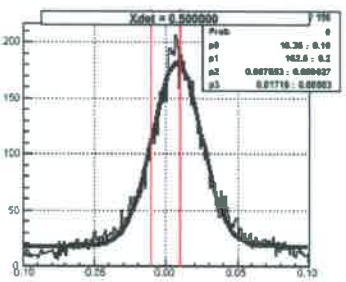
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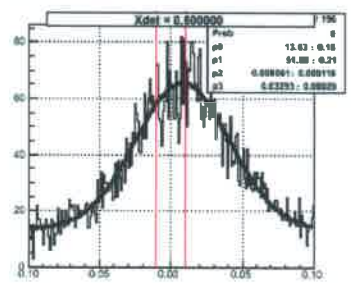
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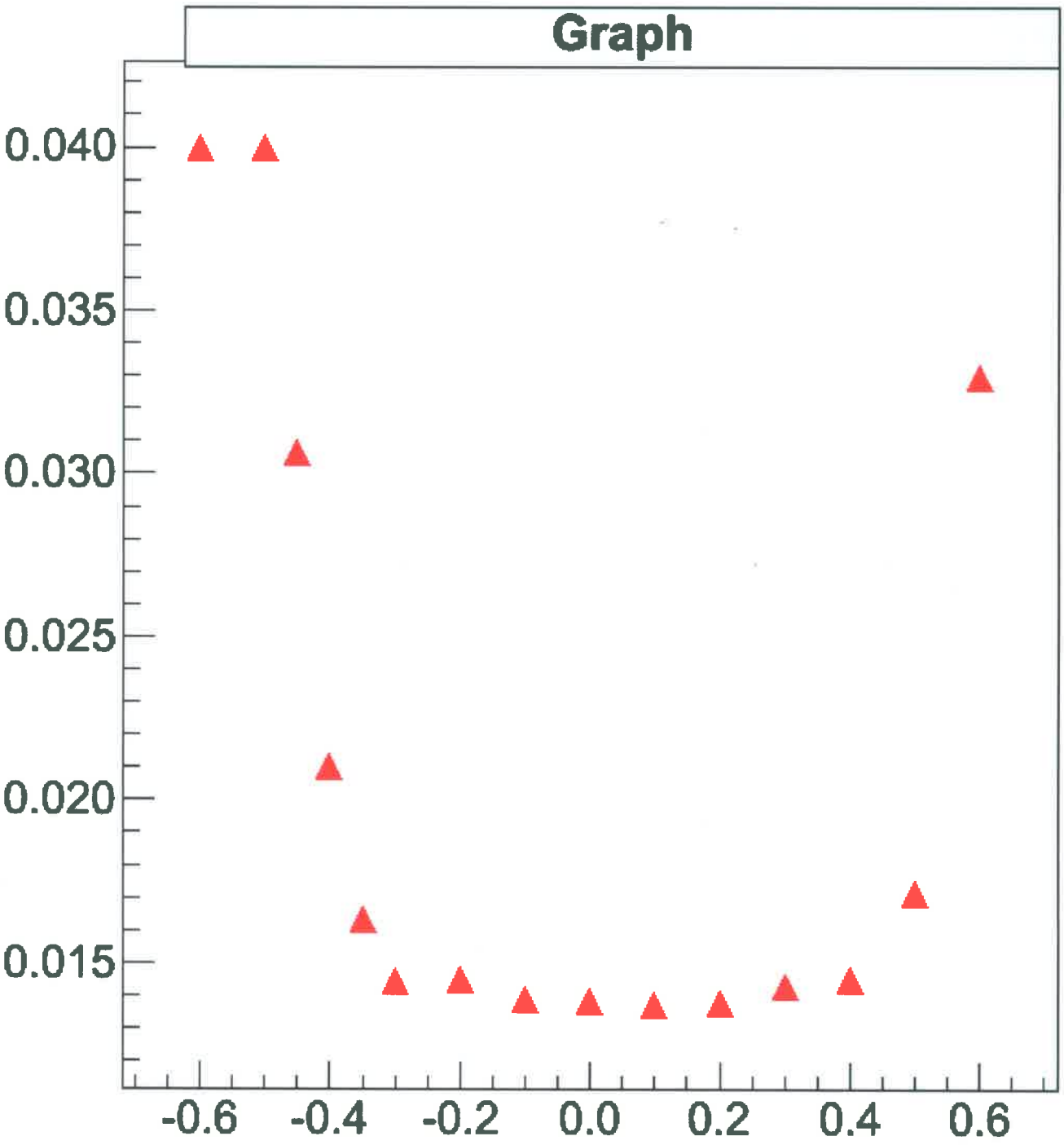
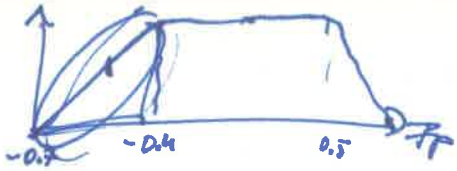
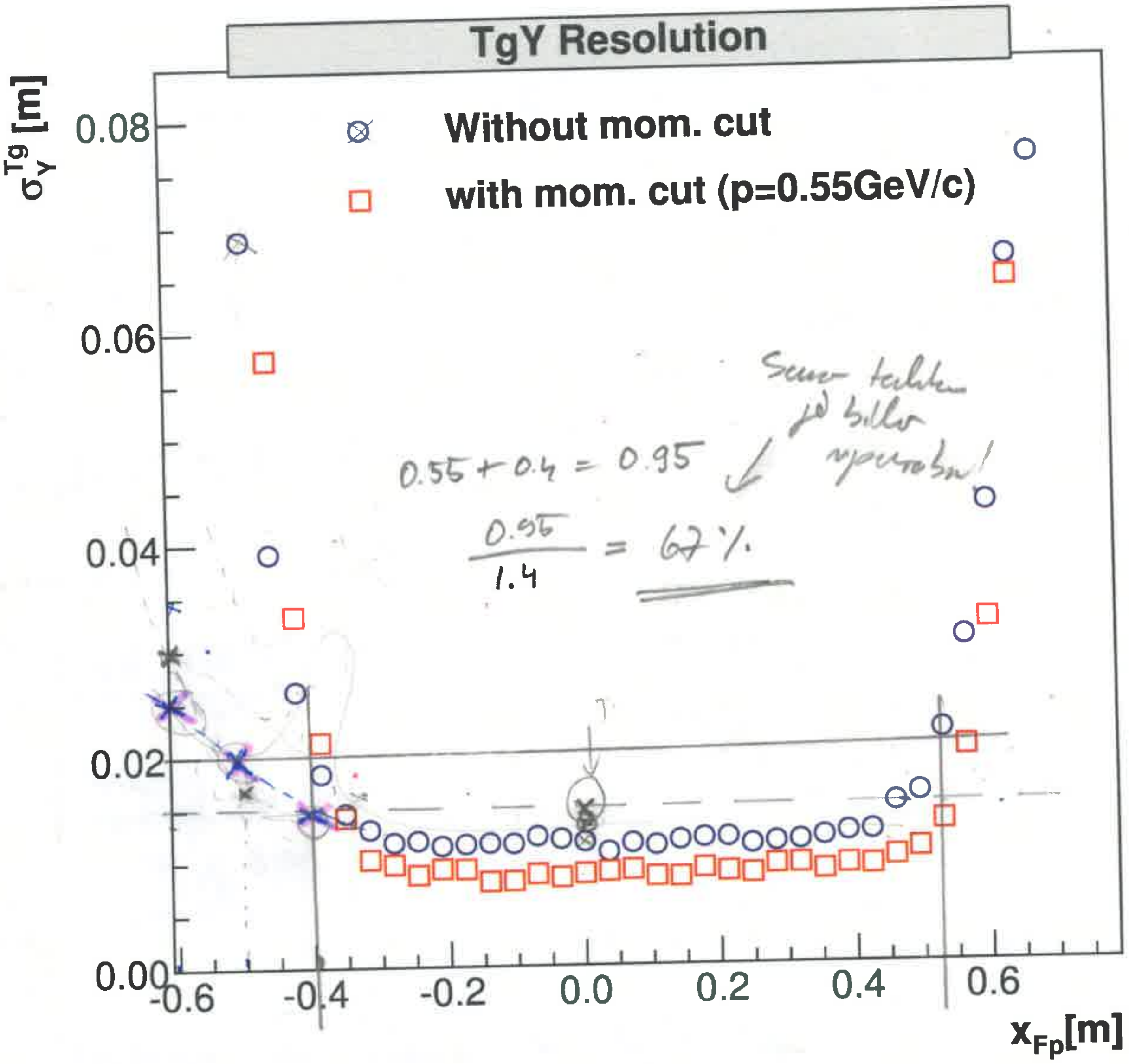

Graph
0.040
0.035
0.030
0.025
0.020
0.015
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6

04/22/11

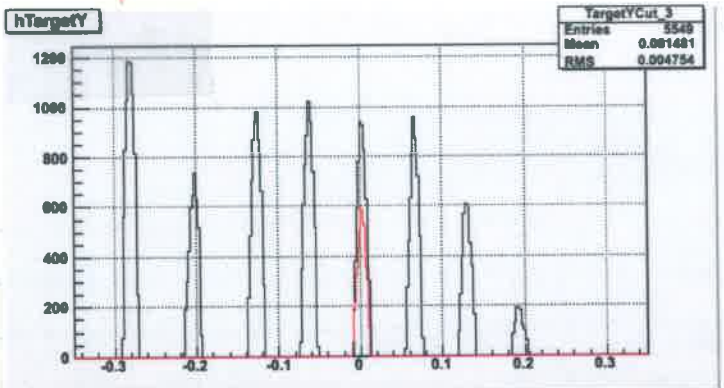


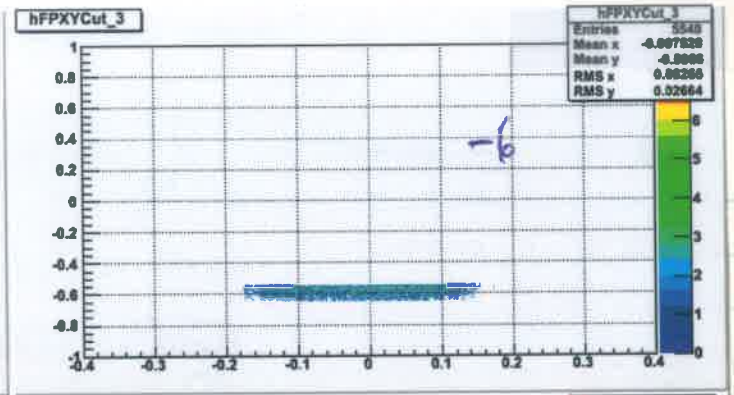


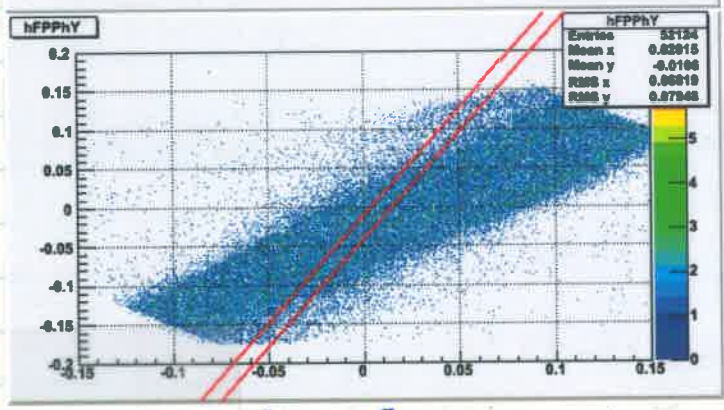
04/23/11

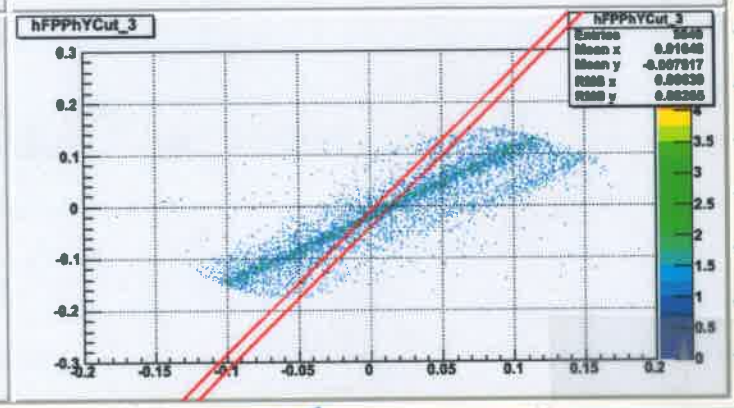
Resolucija z Polno matriko (za ektern) je za Fp x < -0.4 ~ 0.05 m

! Resolucija se ne bo slabšala skoraj nič, če uklopim polno matriko, ker jo uporabljam le za dogodke pri Fp x < -0.4. Za te dogodke deli regularizal, tako pa mi ni treba!









Prva lega: $T_1 = (-0.121842, -0.159658)$ } zgornja

$T_2 = (0.108926, 0.154892)$

$T_3 = (-0.11151, -0.138253)$ } spodnja!

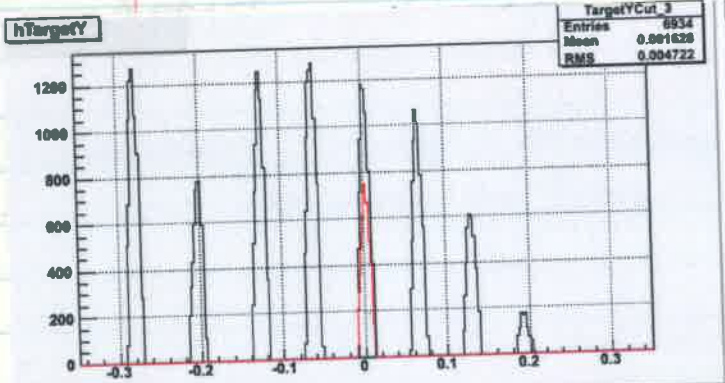
$T_4 = (0.126148, 0.126296)$

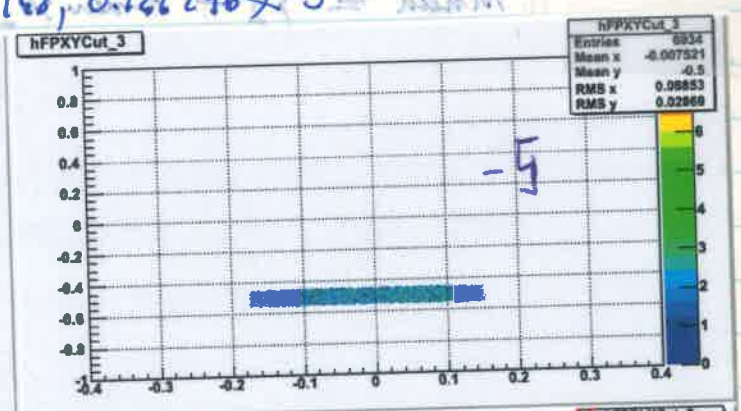
$k_1 = 1.3630$

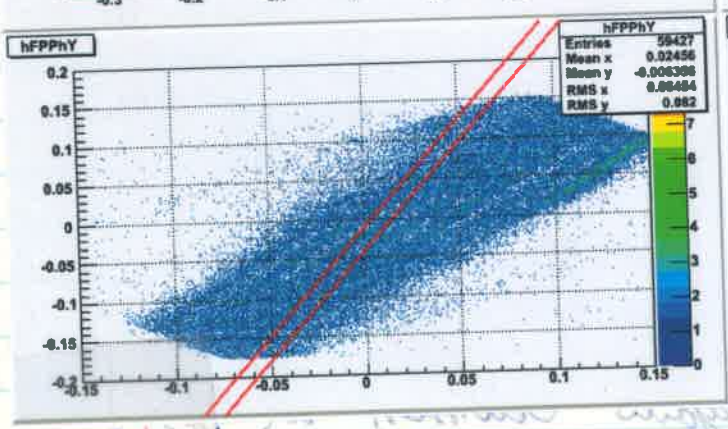
$n_1 = 0.00642$

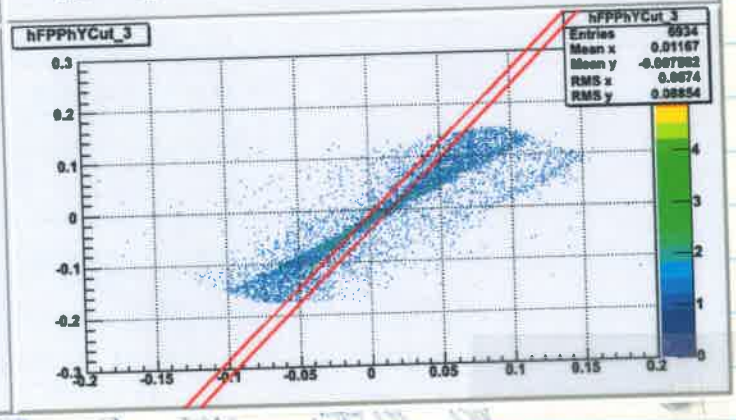
$k_2 = 1.3235$

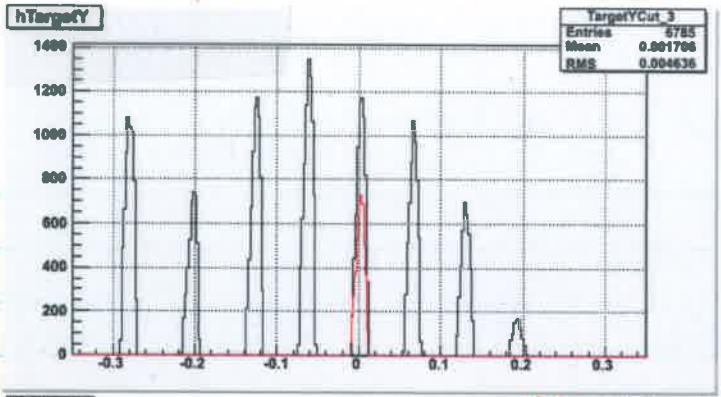
$n_2 = -0.0407$







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TargetYCut_3
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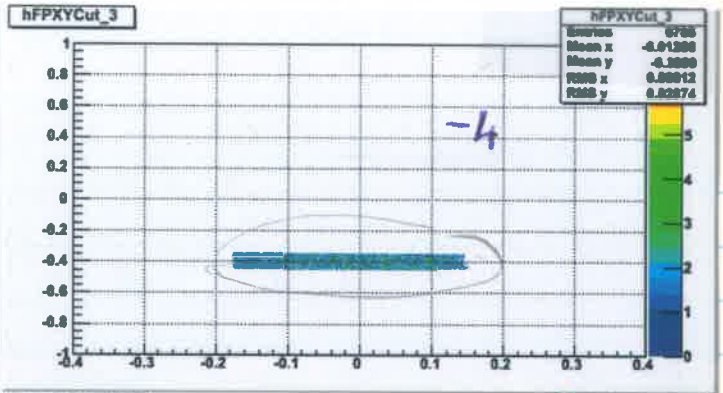
Mean 0.001706
RMS 0.004636


hFPXYCut_3
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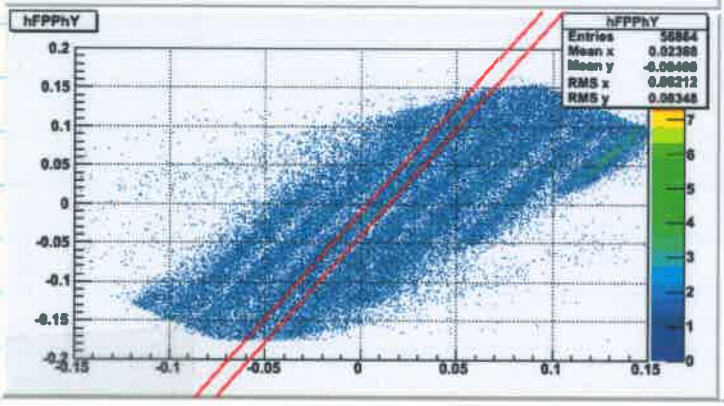
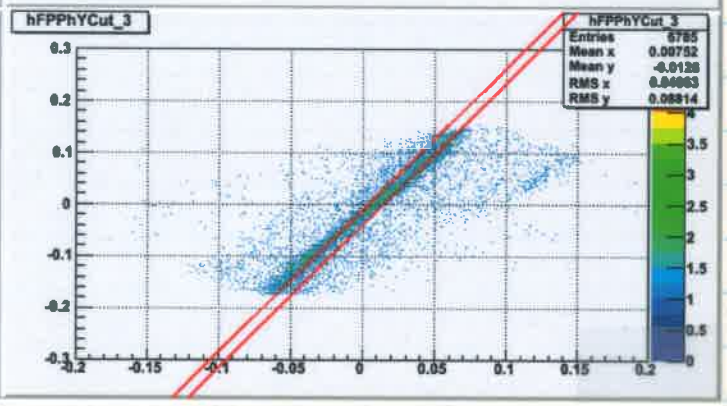

hFPPhY
Entries 56864
Mean x 0.02368
Mean y -0.00466
RMS x 0.06212
RMS y 0.08348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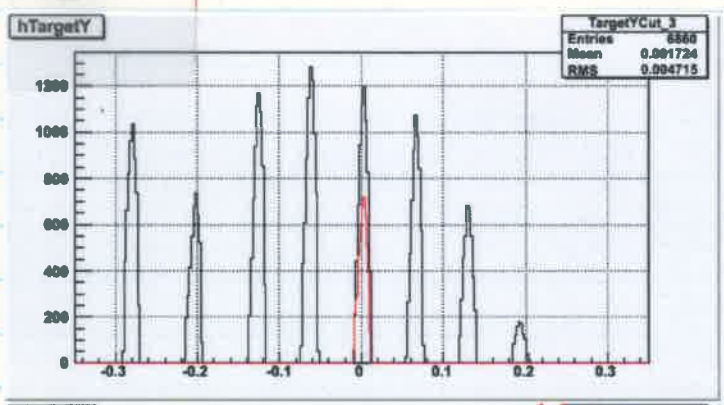
Mean y -0.0128
RMS x 0.04963
RMS y 0.05914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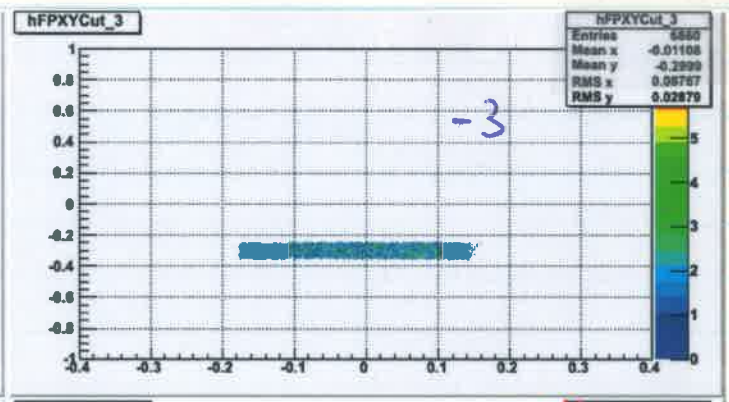
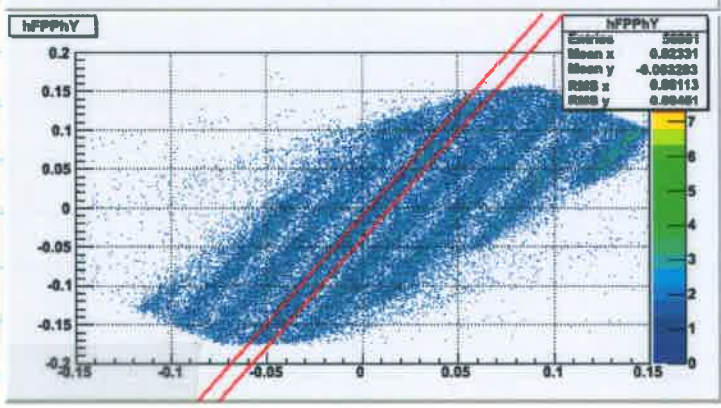
RMS 0.004715


hFPXYCut_3
-3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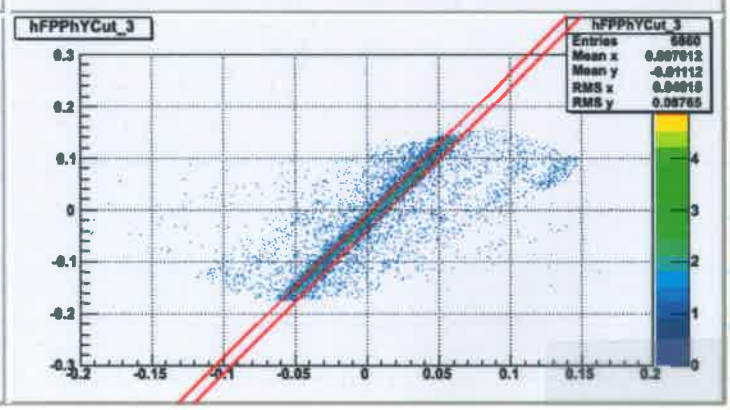
Mean y -0.003283
RMS x 0.06113
RMS y 0.08461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Entries 6560
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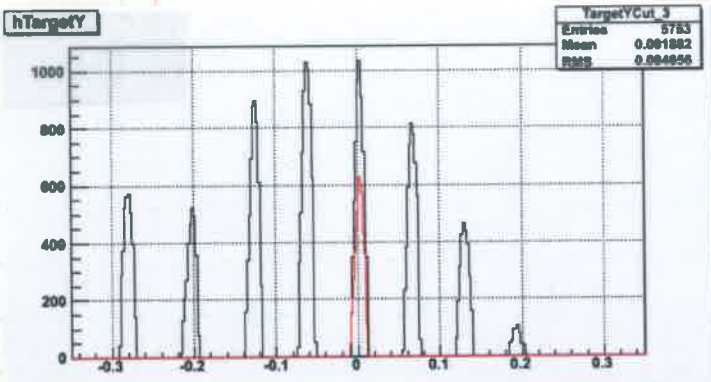
Mean y -0.01112
RMS x 0.04618
RMS y 0.05765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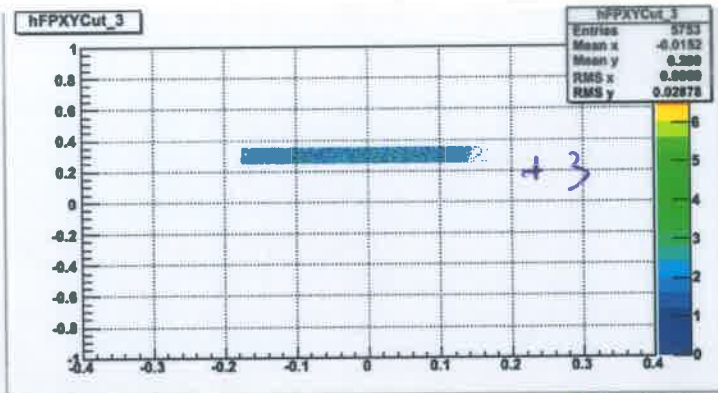
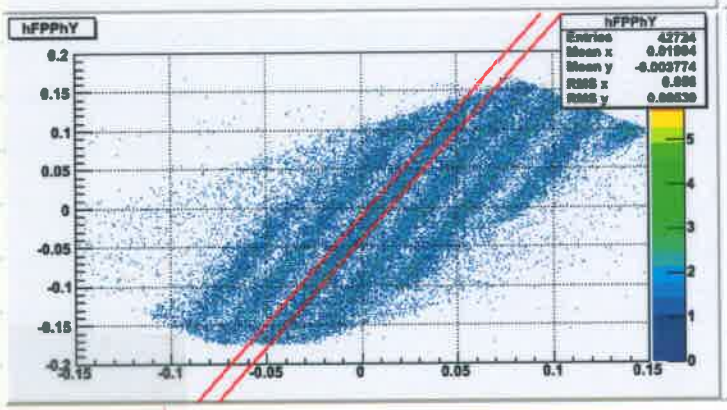
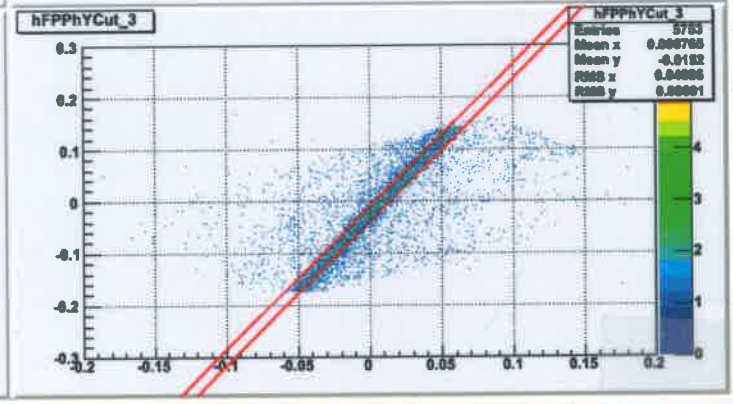
TargetYCut_3
Entries 5753
Mean 0.001982
RMS 0.004656


hFPXYCut_3
hFPXYCut_3
Entries 5753
Mean x -0.0152
Mean y 0.3288
RMS x 0.09699
RMS y 0.02878
+3


hFPPhY
hFPPhY
Entries 42734
Mean x 0.01994
Mean y -0.003774
RMS x 0.068
RMS y 0.08539


hFPPhYCut_3
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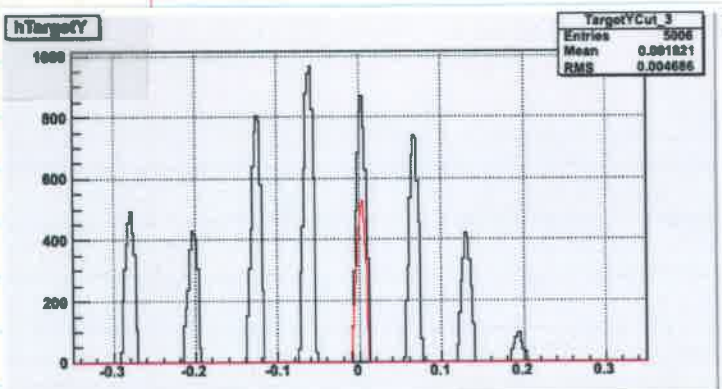
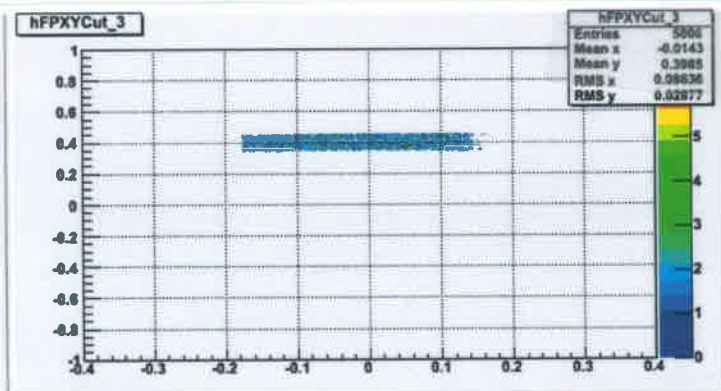
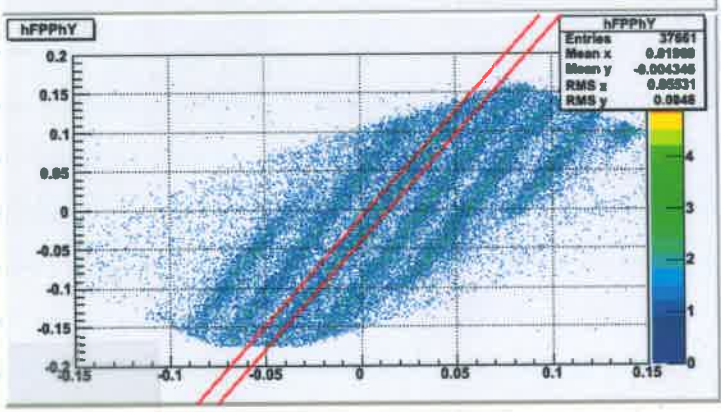
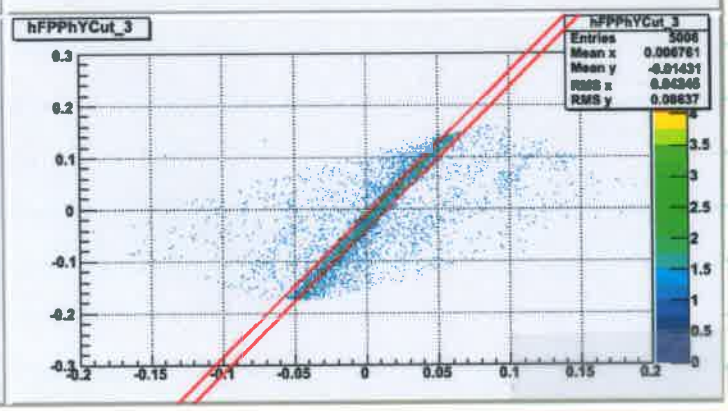
Entries 5753
Mean x 0.006768
Mean y -0.01152
RMS x 0.04986
RMS y 0.08691


hTargetY
TargetYCut_3
Entries 5006
Mean 0.001821
RMS 0.004686


hFPXYCut_3
hFPXYCut_3
Entries 5006
Mean x -0.0143
Mean y 0.3985
RMS x 0.09636
RMS y 0.02877


hFPPhY
hFPPhY
Entries 37661
Mean x 0.01988
Mean y -0.004346
RMS x 0.06531
RMS y 0.0848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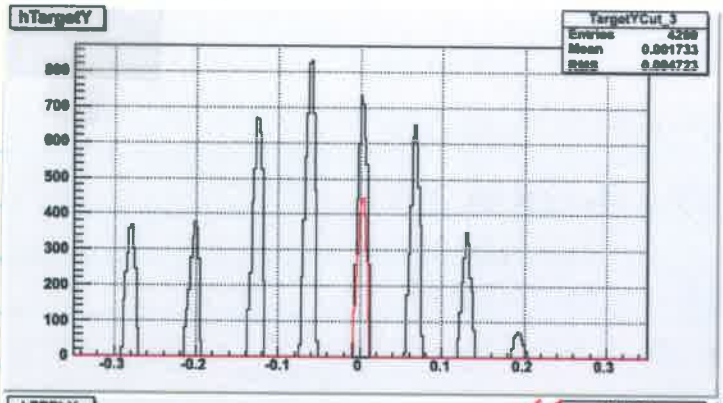
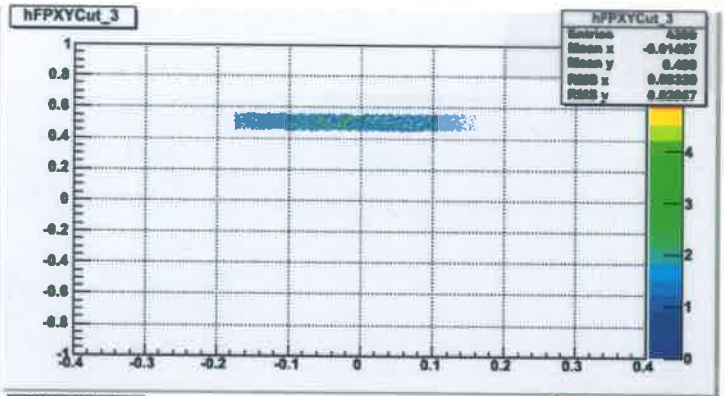
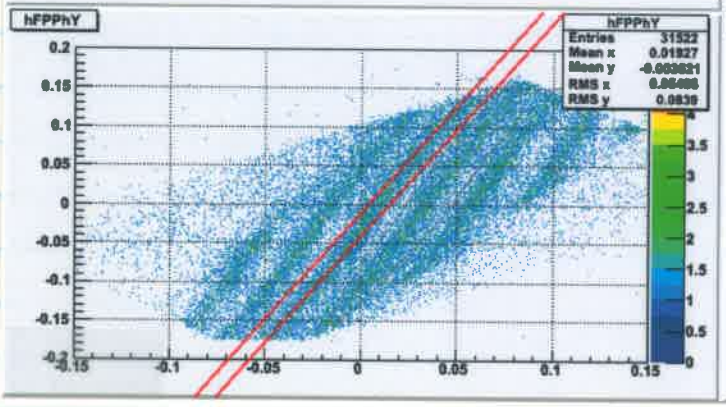
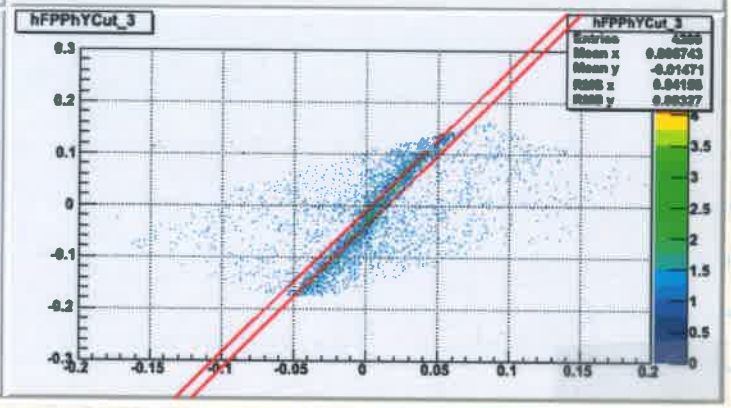
hFPPhYCut_3
Entries 5006
Mean x 0.006761
Mean y -0.01431
RMS x 0.04946
RMS y 0.08637


hTargetY
TargetYCut_3
Entries 4288
Mean 0.001733
RMS 0.004723


hFPXYCut_3


hFPPhY
Entries 31522
Mean x 0.01827
Mean y -0.003631
RMS x 0.05485
RMS y 0.0839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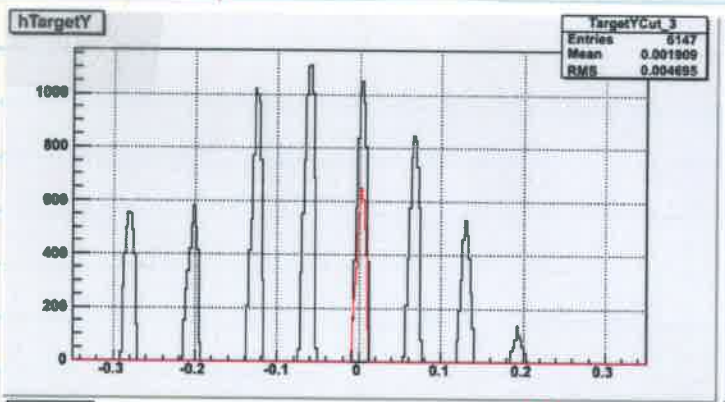
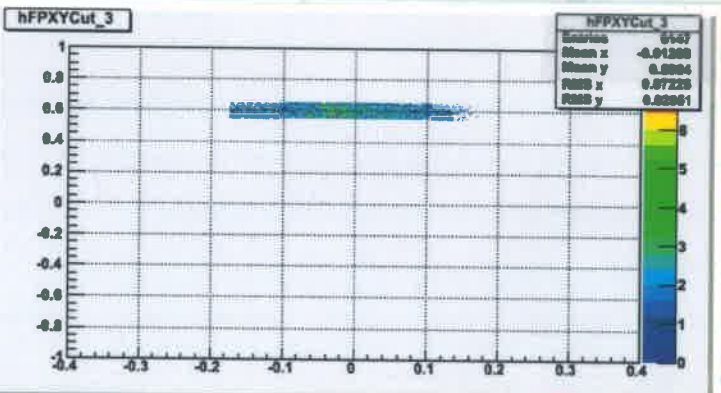
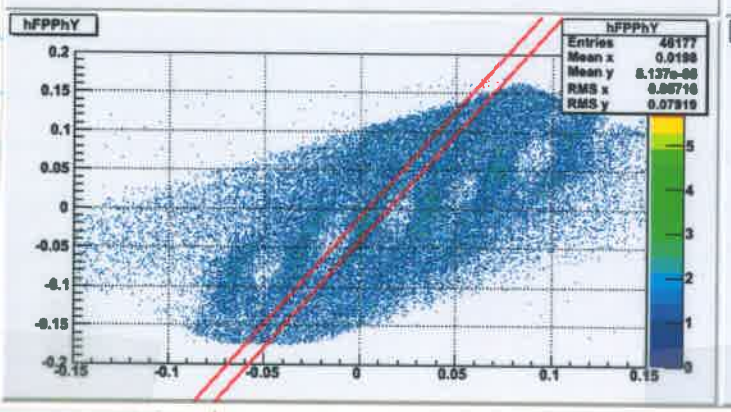
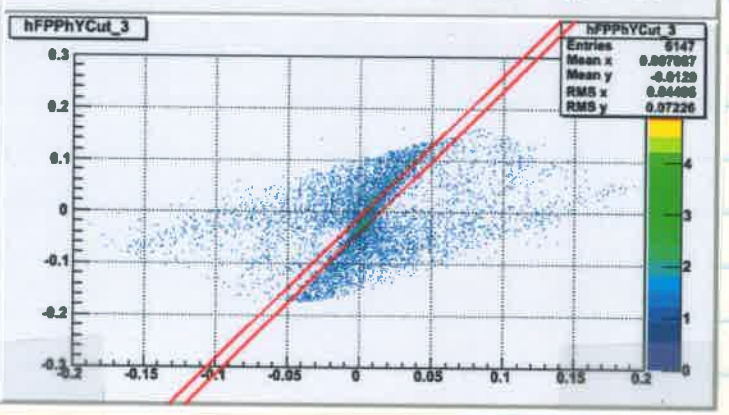
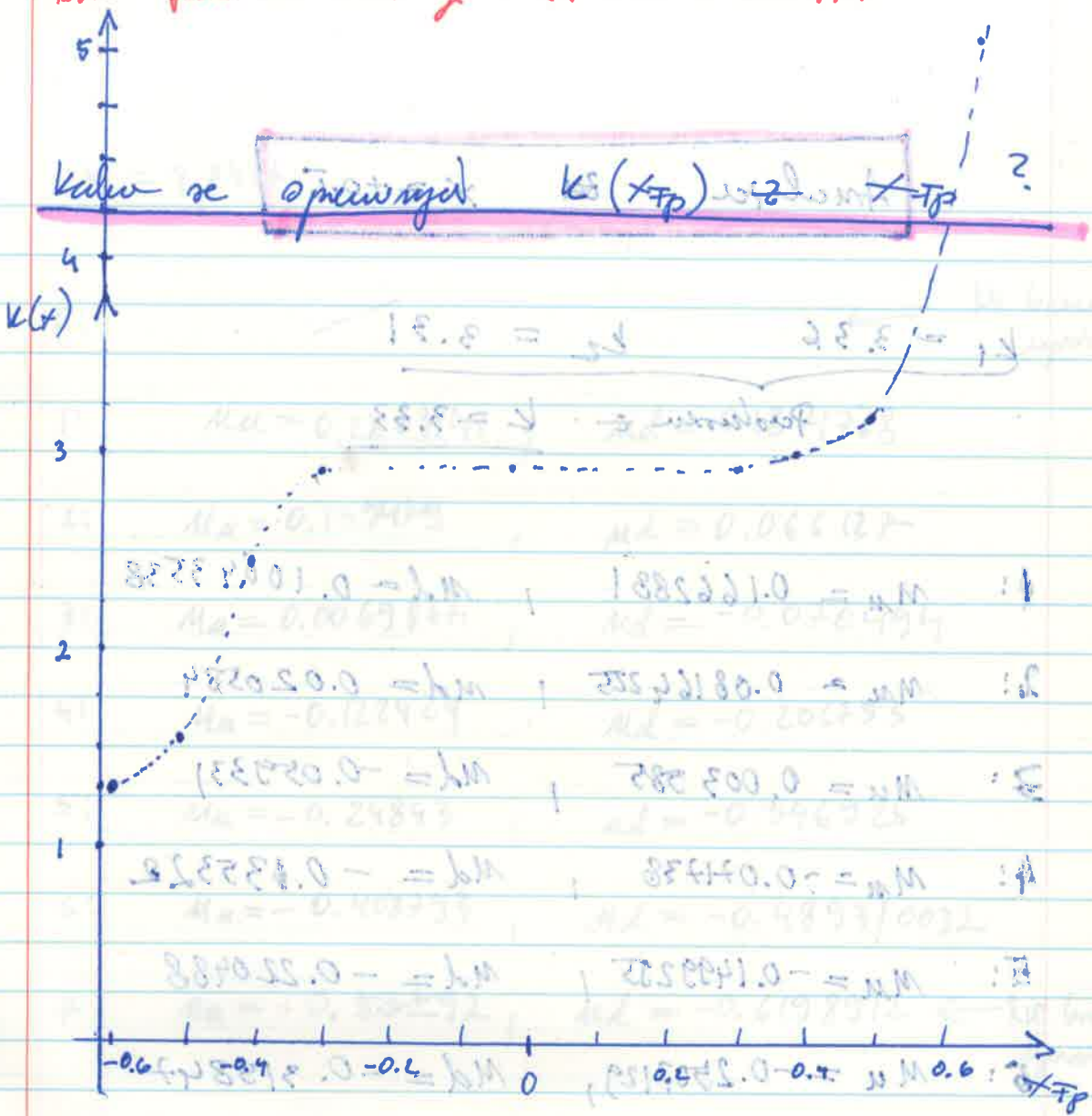

hTargetY
TargetYCut_3
Entries 6147
Mean 0.001909
RMS 0.004695


hFPXYCut_3


hFPPhY
Entries 46177
Mean x 0.0198
RMS x 0.05716
RMS y 0.07919


hFPPhYCut_3
Entries 6147
RMS y 0.07226

Brez fakt za +0.4 je σ za +0.4 = 0.054 m



Kaže se optimum $K_S(x_{Tp})$ x_{Tp} ?

1: $\mu_M = 0.14605$, $\mu_d = 0.0909949$

2: $\mu_M = 0.07353$, $\mu_d = 0.0205845$

3: $\mu_M = -0.00004$, $\mu_d = -0.059331$

4: $\mu_M = -0.074162$, $\mu_d = -0.119178$

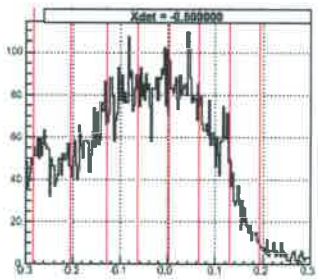
5: $\mu_M = -0.14193$, $\mu_d = -0.192762$

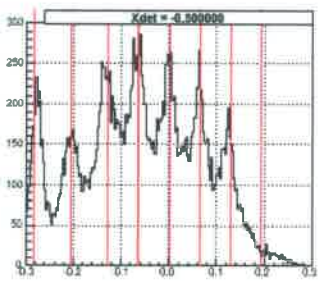
6: $\mu_M = -0.218167$, $\mu_d = -0.27800$

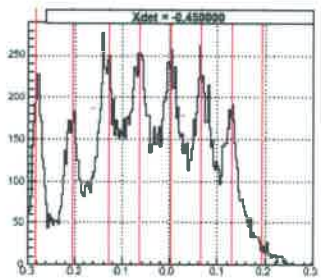
7: $\mu_M = -0.3008$, $\mu_d = -0.352083$

0:

New Results


Xdet = -0.500000


Xdet = -0.500000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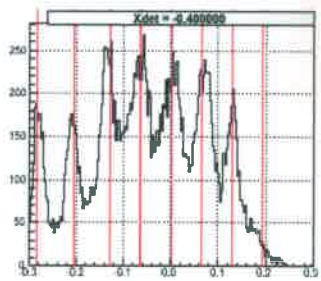
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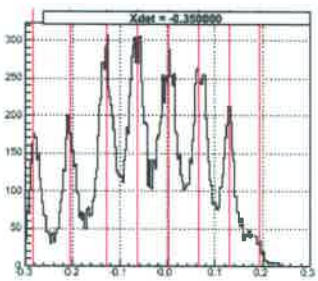
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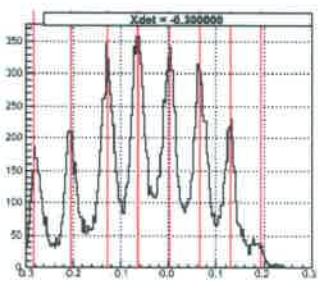
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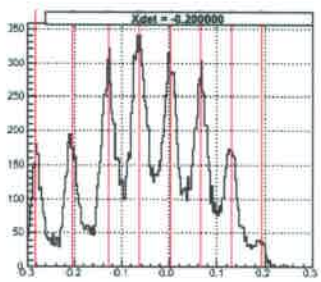
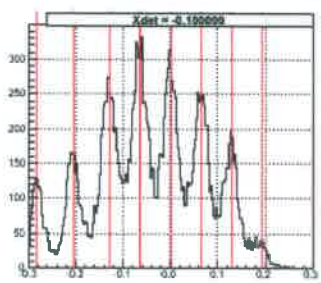
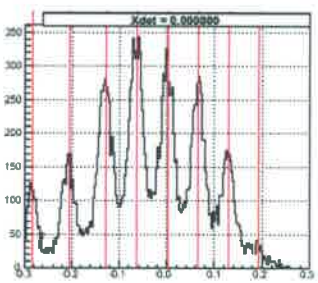
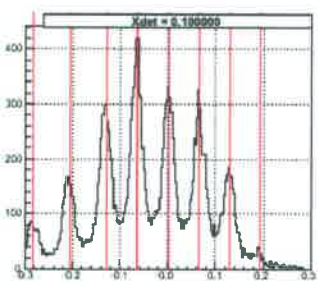

Xdet = -0.200000


Xdet = -0.100000


Xdet = 0.000000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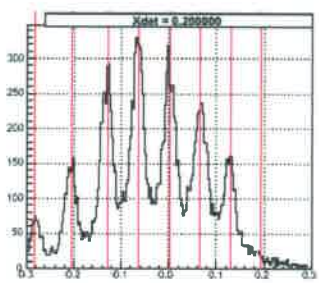
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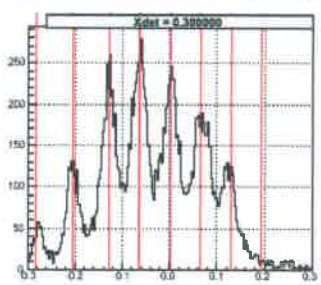
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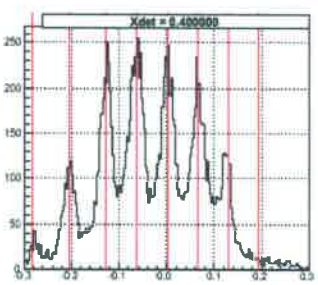
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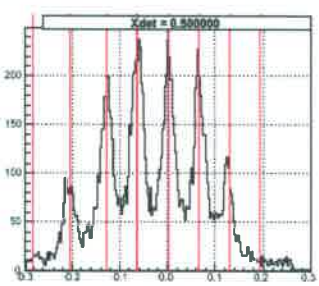
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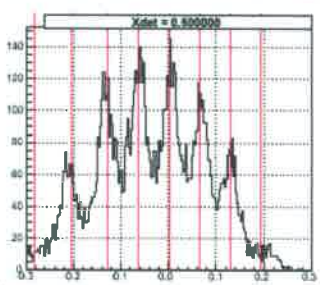
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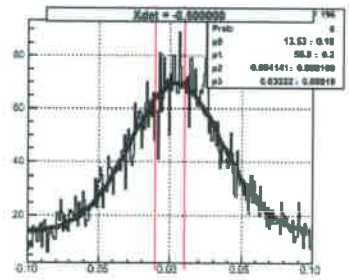
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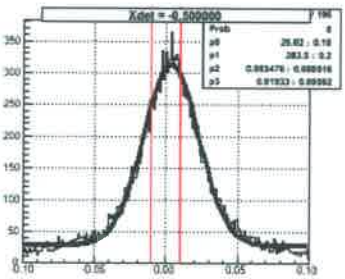
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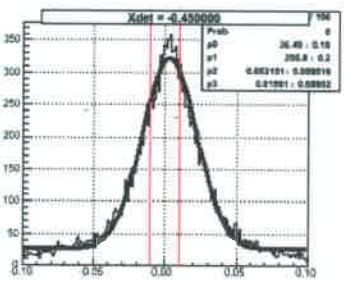
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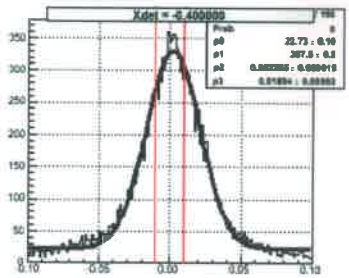
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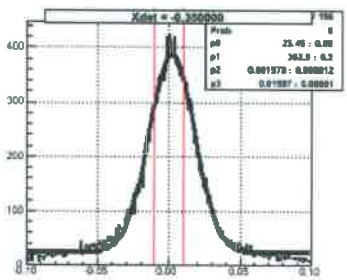
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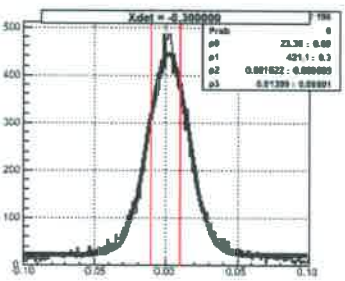
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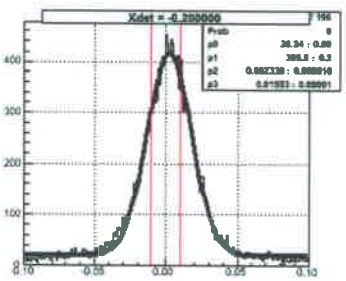
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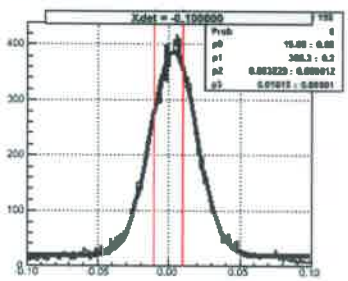
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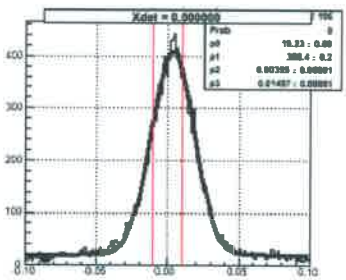
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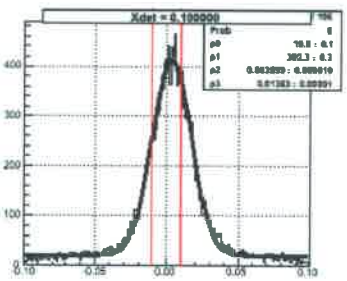
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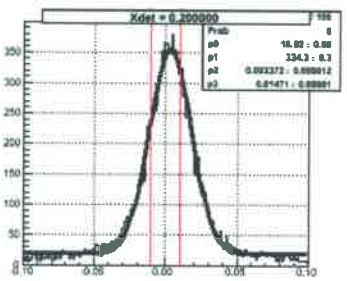
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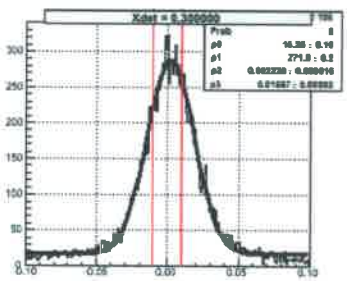
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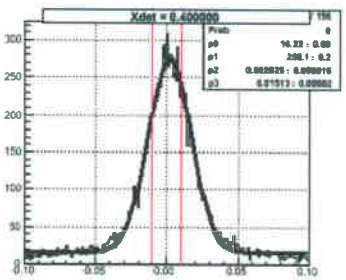
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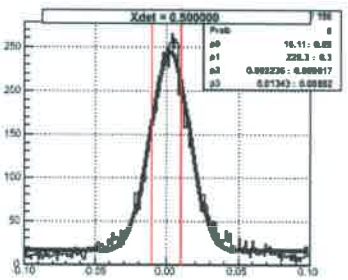
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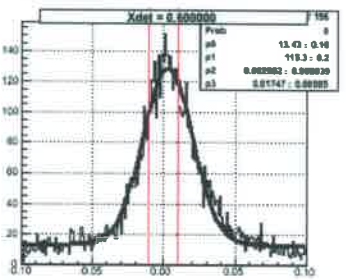
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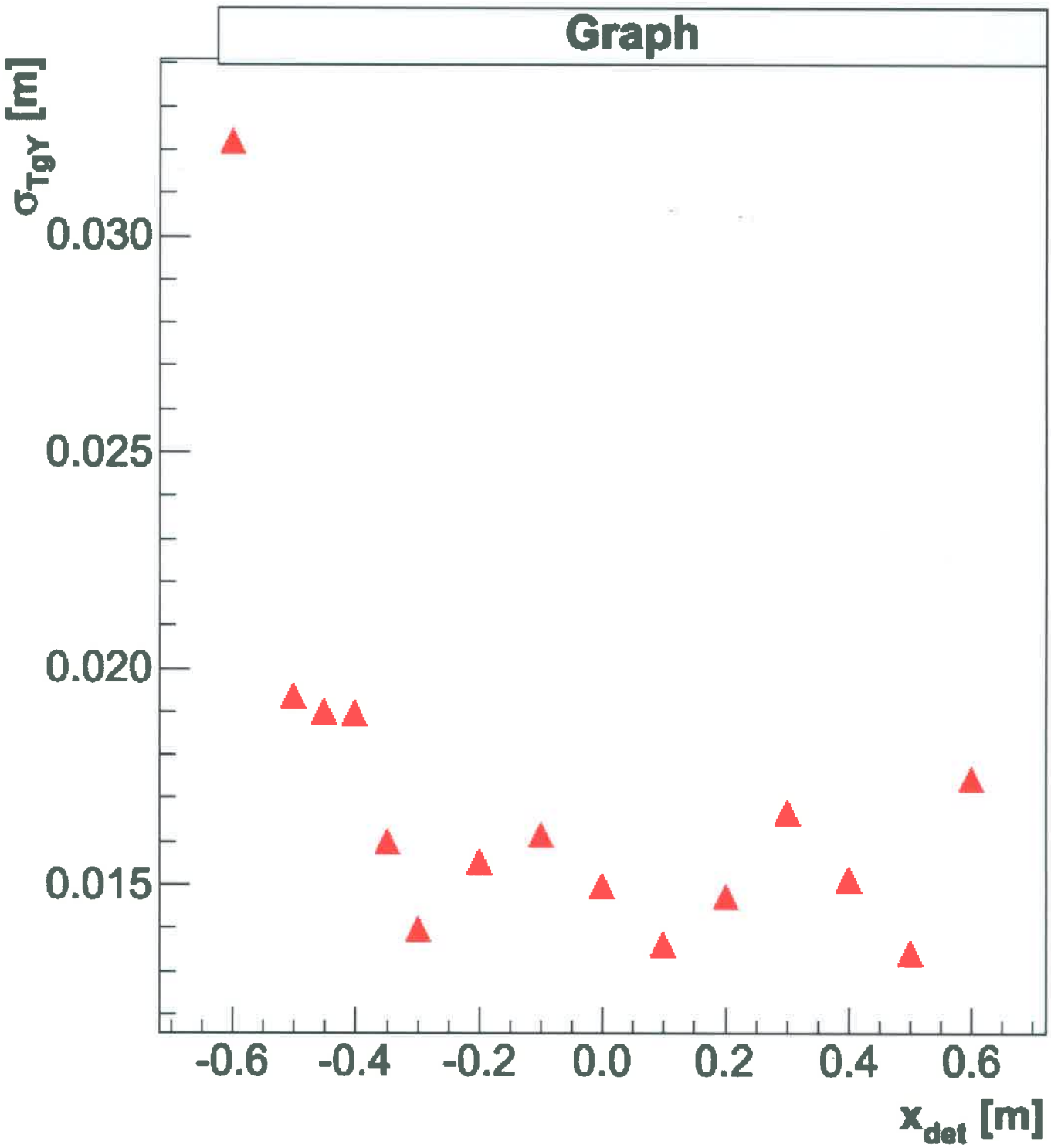
Graph
σ_{TgY} [m]
0.030
0.025
0.020
0.015
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
x_{det} [m]