



UPDATES

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Outline

- check the `dpel_hms` shift variations with the HMS central angle
- Looked at the Sieve Slit
- Checked with the BigCal calibration

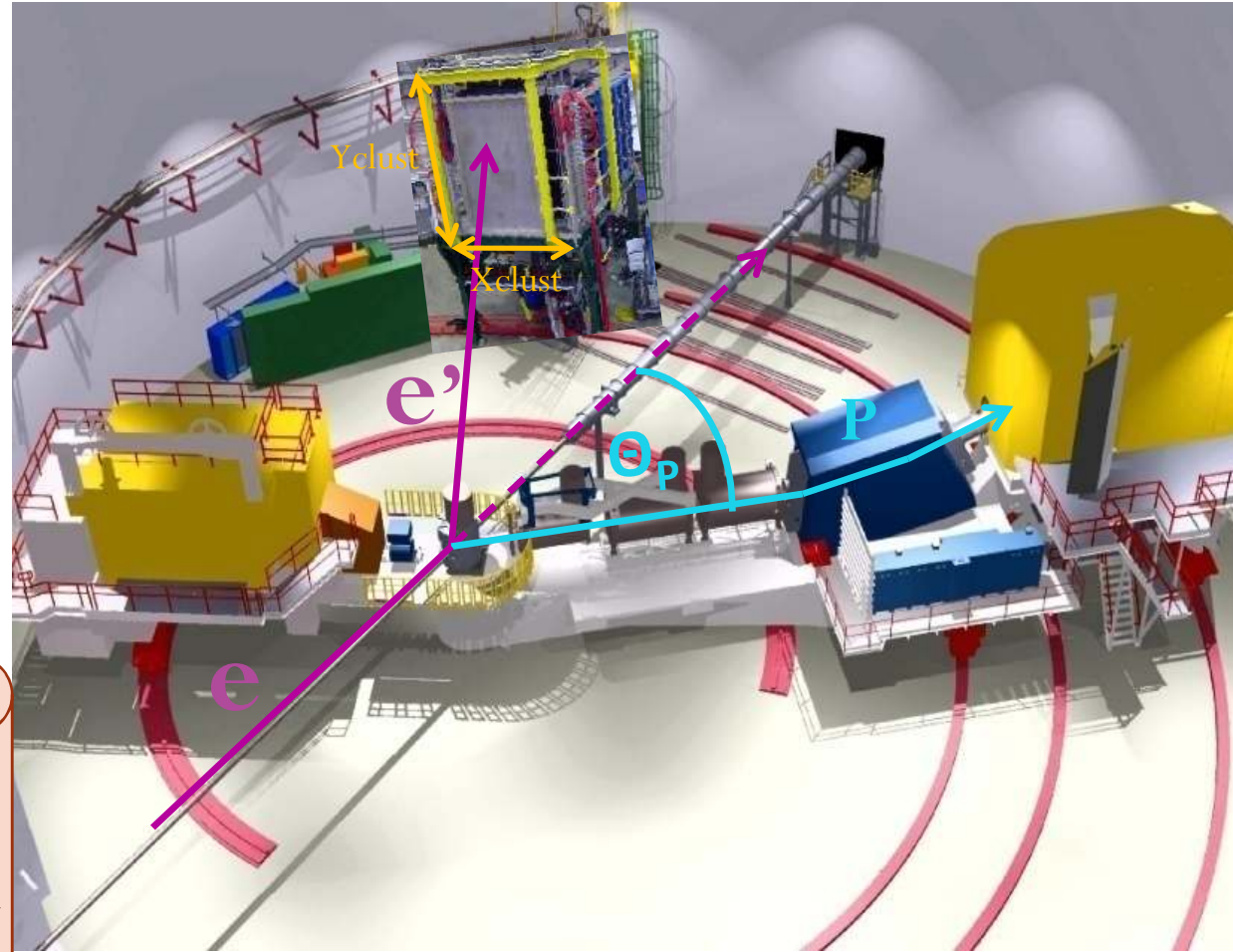
Definitions :

$$dPel_hms = \frac{P_{HMS} - P_{Cal}}{P_{cent}}$$

X/Y_{clust} - Measured X/Y positions on the BigCal

- X = horizontal / in-plane coordinate
- Y = vertical / out-of-plane coordinate

E_{clust} - Measured electron energy at the BigCal



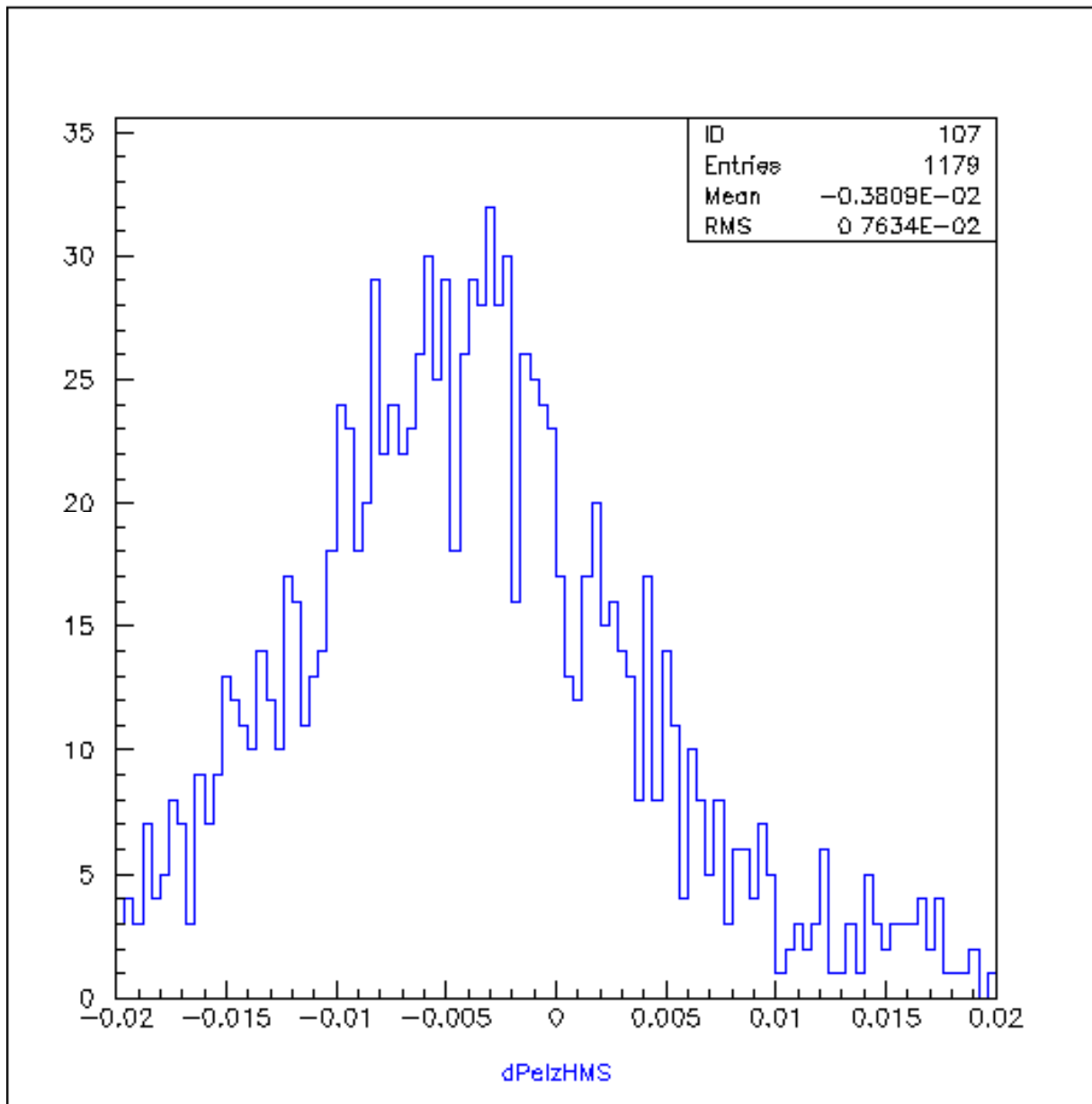
By knowing
the energy of the polarized electron
beam, E_B
and
the scattered proton angle, Θ_p



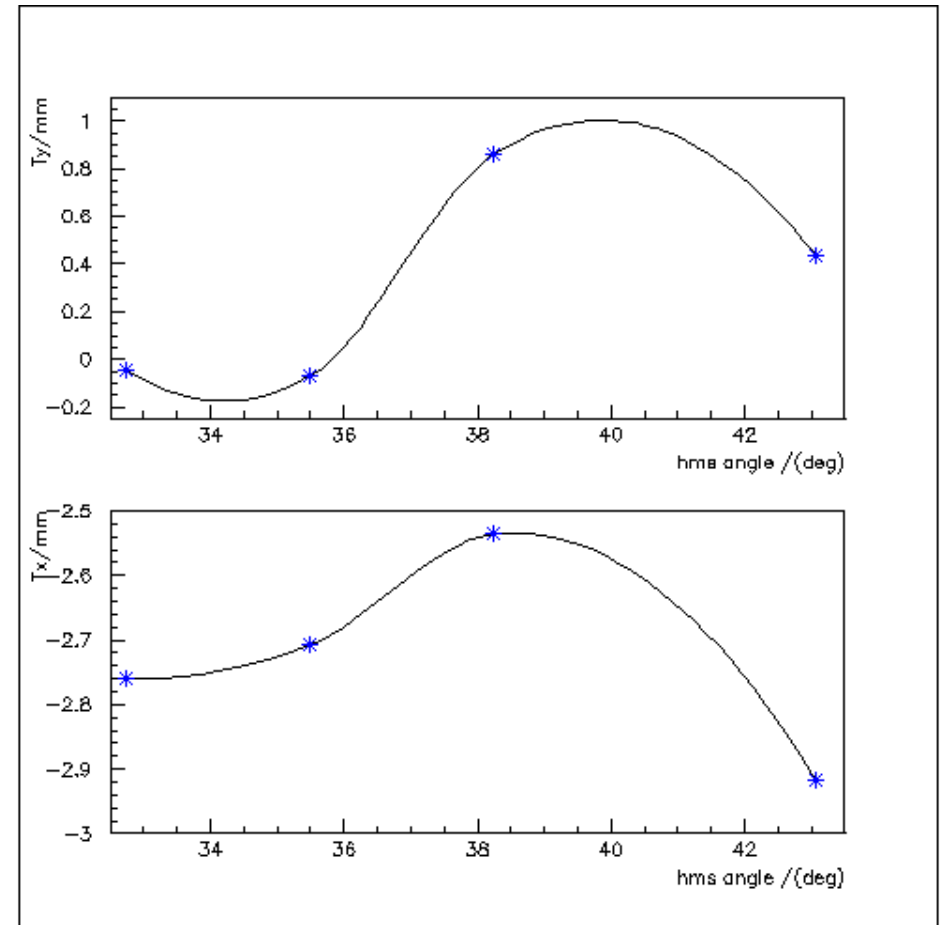
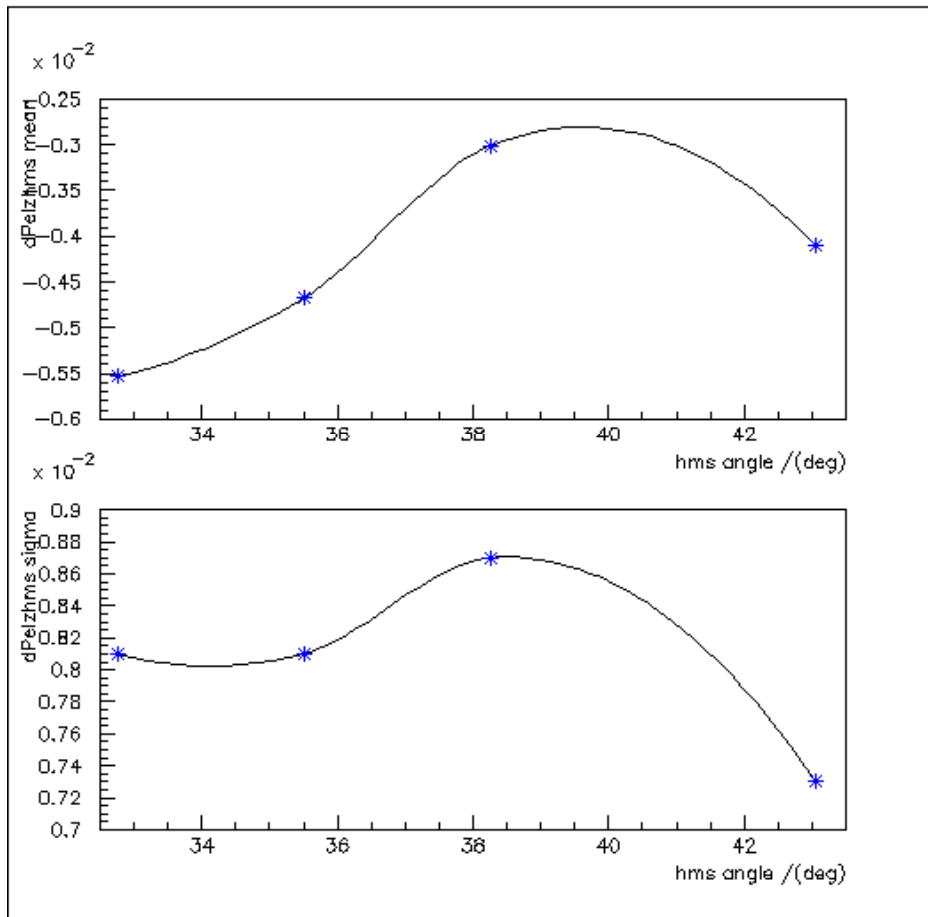
We can predict the

- X/Y coordinates - X_{HMS} , Y_{HMS} and (Target Magnetic Field Corrected)
- The Energy - E_{HMS} of the coincidence electron on the BigCal

dPel_hms peak

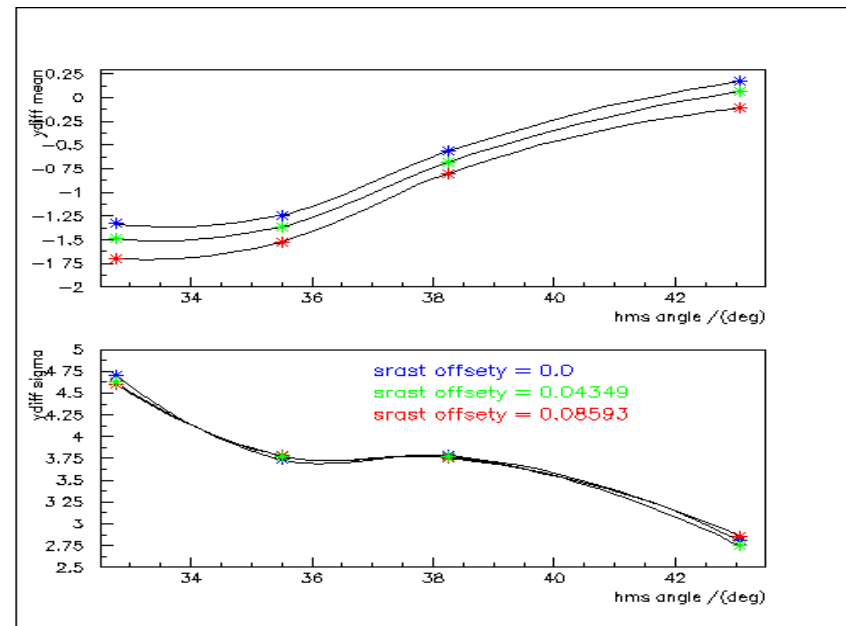
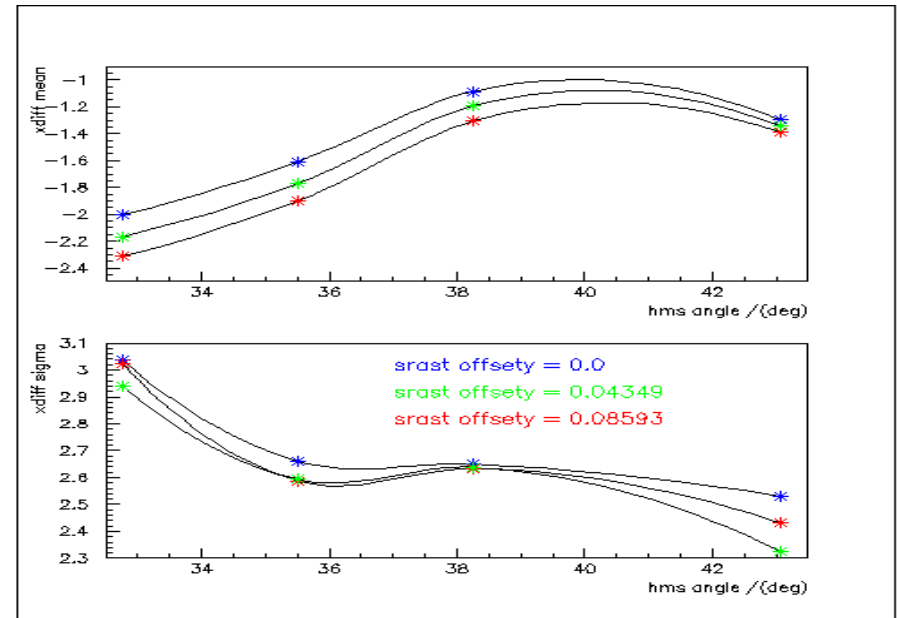
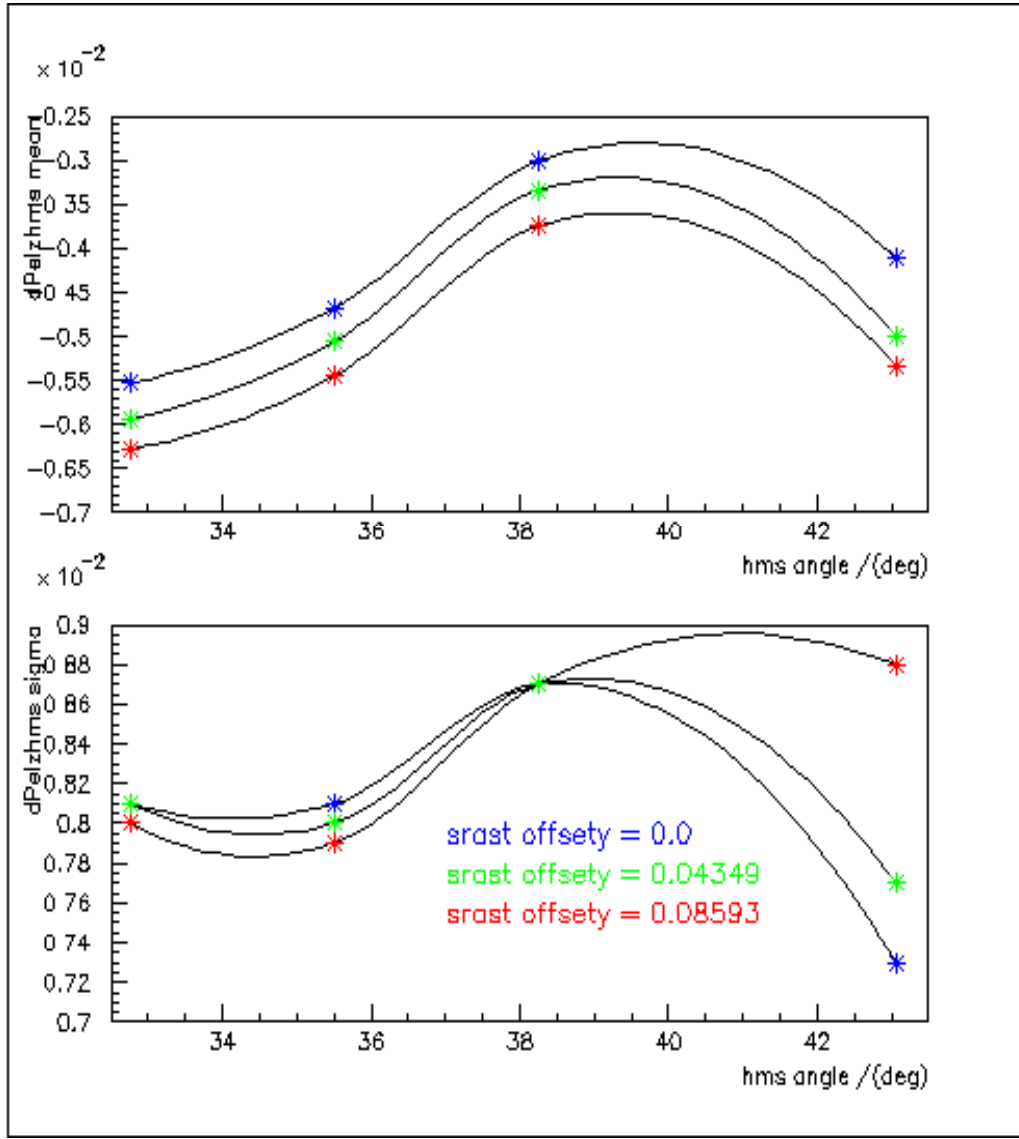


In order to study the above dPel_hms shift, plotted the shift vs HMS angle and the BPMX/BPMY projected to the target vs HMS angle for the selected early runs.



Used the above two higher Ty positions (0.4349 and 0.8593) as the srasty offset separately and check how it effect to the dPel_hms shift and compare it with the 0 srasty offset.

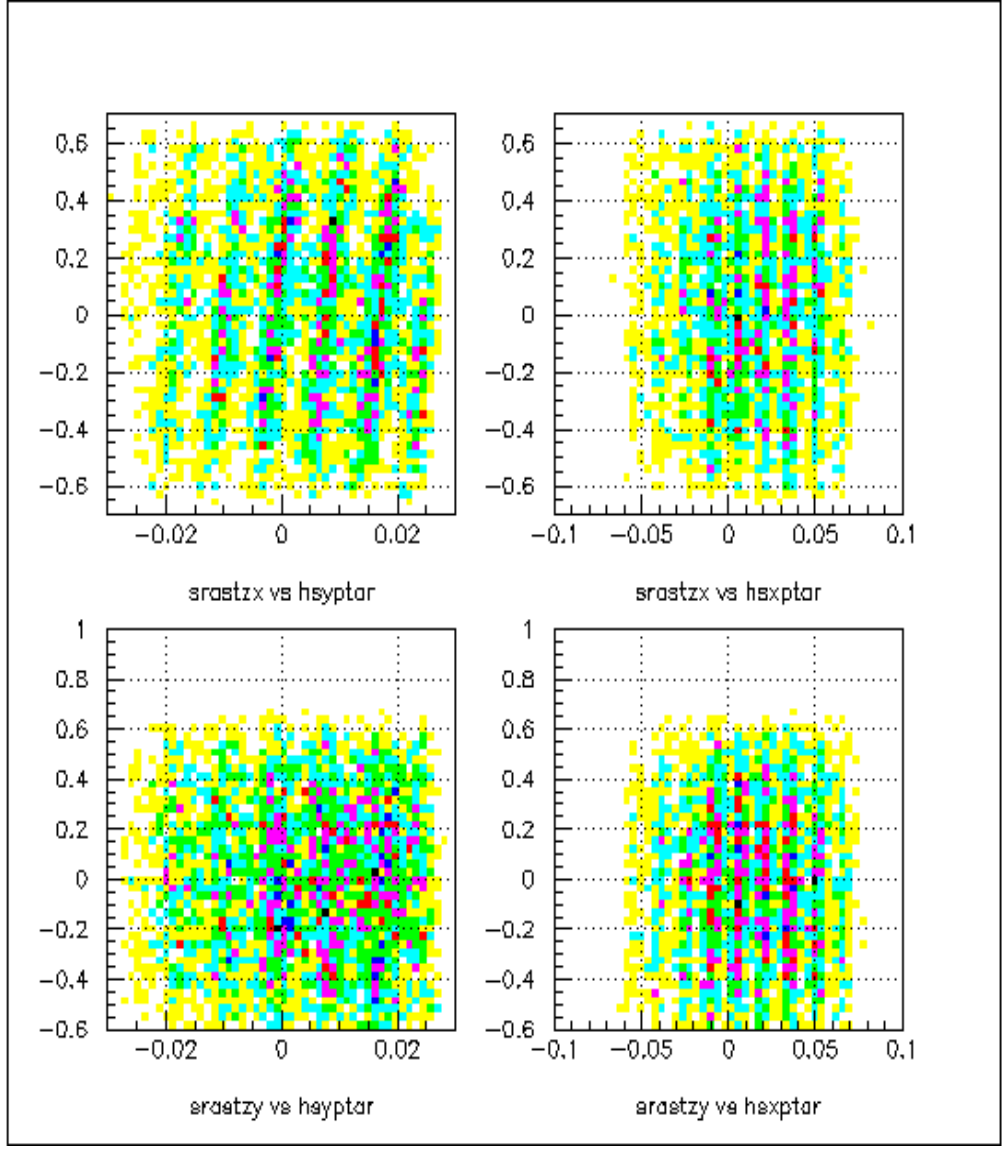
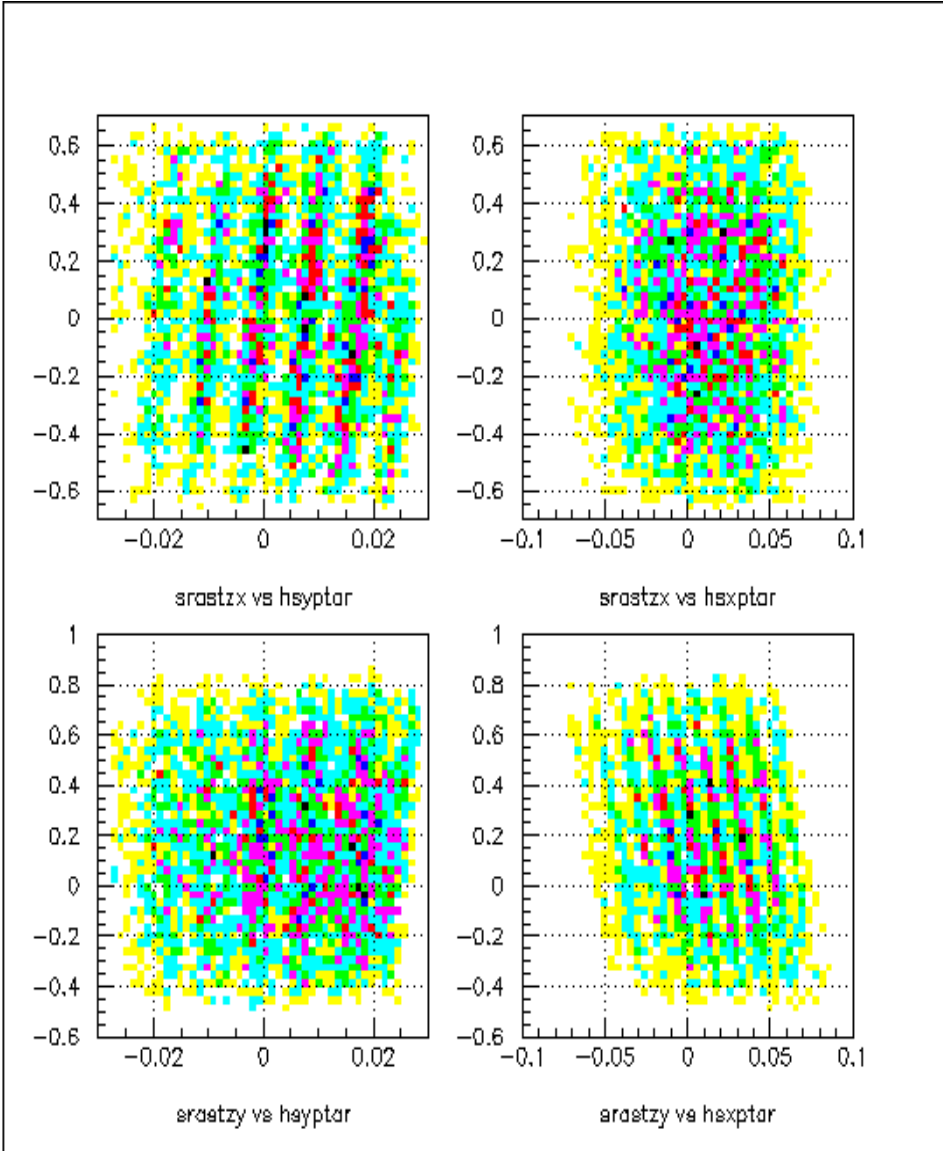
With different srasty offset

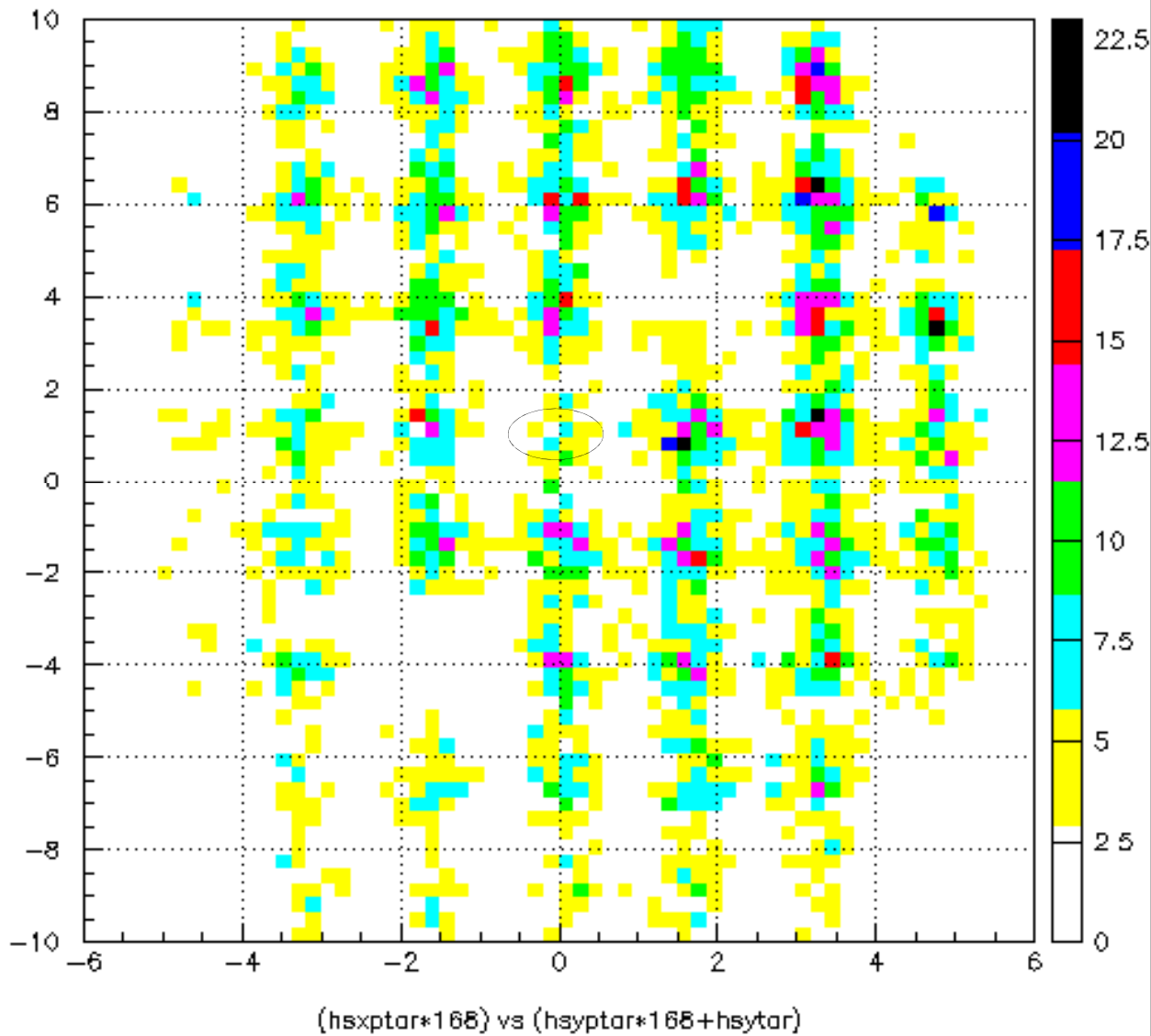


Looked at the Sieve Slit runs

$n_sr_slopey = -$ (negative)

$n_sr_slopey = +$ (positive)

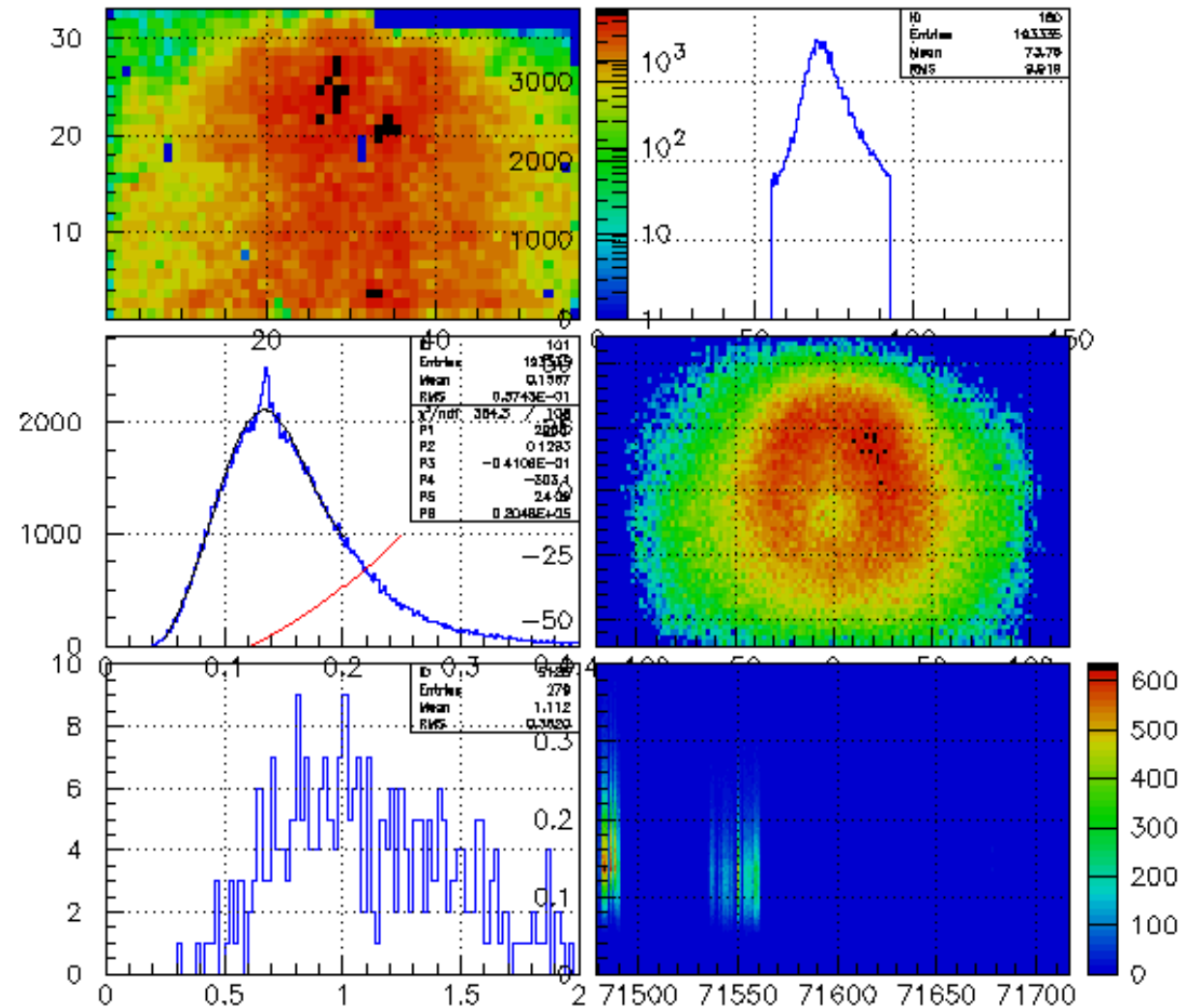




The smallest hole is
shifted ~ 1.0 cm.

???

BigCal Calibration ...



- Modifying the Calibration to use the low energy blocks also and
- Check with the new Neural Network.