

SRS TB ANALYSIS - OCCUPANCY

19. 05. 2021.

Files and cuts

Files/runs:

- Run 16 - 5 GeV, energy scan
- Run 22 - 4 GeV, energy scan
- Run 32 - 3 GeV, energy scan
- Run 36 - 2 GeV, energy scan
- Run 46 - 1 GeV, energy scan

W in front of the 1st sensor!

Signal cuts (to reduce noise):

- $0.5 < \tau < 3.2$
- $0 < \text{signal} < 2000$
- $-2 < t_0 - t_1 < -0.5$
- $N_n > 50\%$

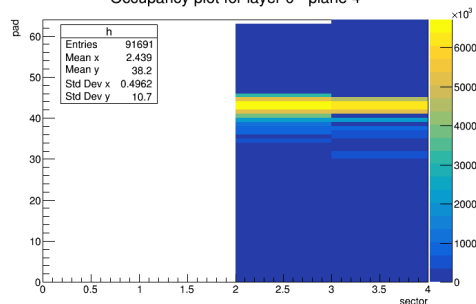
Connecting the SRS to the lumical. Chems:

Sensor (Plane)	APV	HRMI	FEC No. 0
59	4	4	1
10	5	5	2
57	6	6	3
Free	7	7m	4
53	8	8	5
64	10	9	6
T2	12	10	7
61	14	11	8

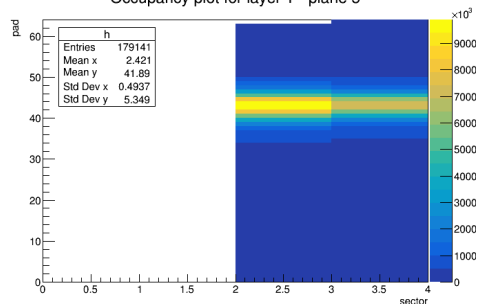
Planes 1,2,3 connected to the FLAME boards

Run 16, 5 GeV, high gain

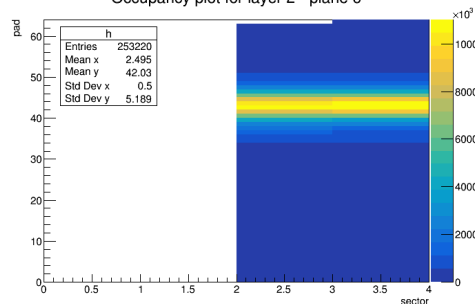
Occupancy plot for layer 0 - plane 4



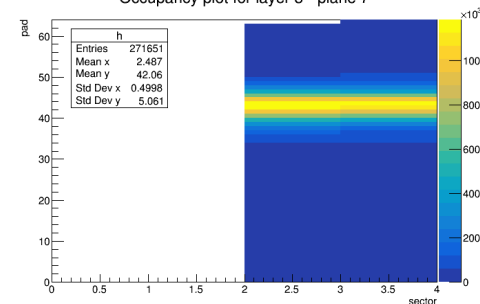
Occupancy plot for layer 1 - plane 5



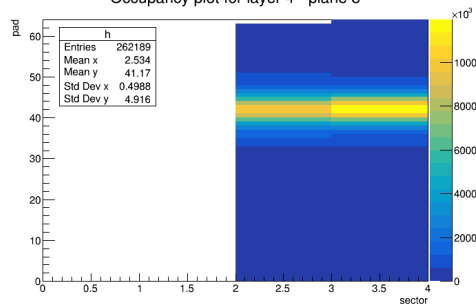
Occupancy plot for layer 2 - plane 6



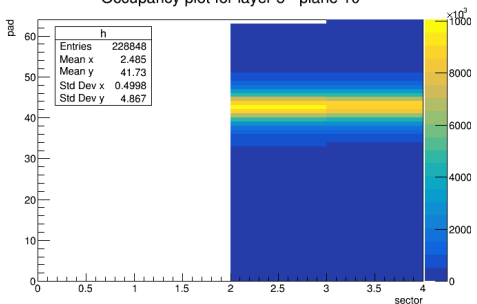
Occupancy plot for layer 3 - plane 7



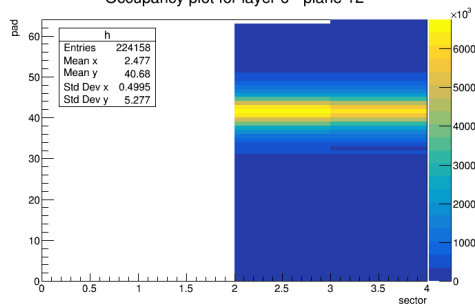
Occupancy plot for layer 4 - plane 8



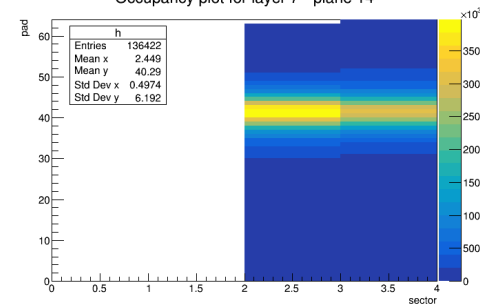
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

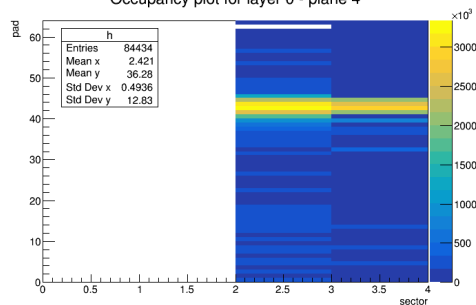


Occupancy plot for layer 7 - plane 14

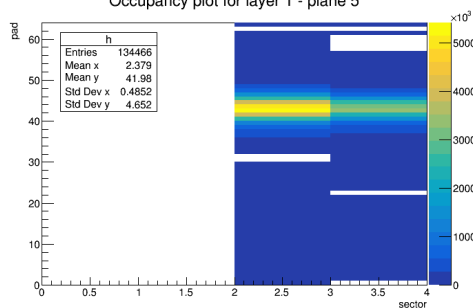


Run 16, 5 GeV, low gain

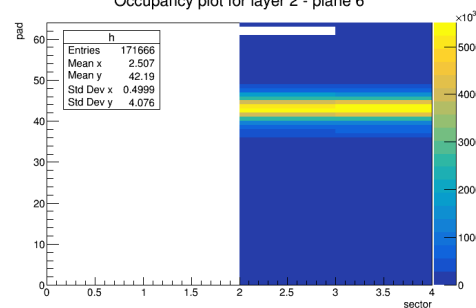
Occupancy plot for layer 0 - plane 4



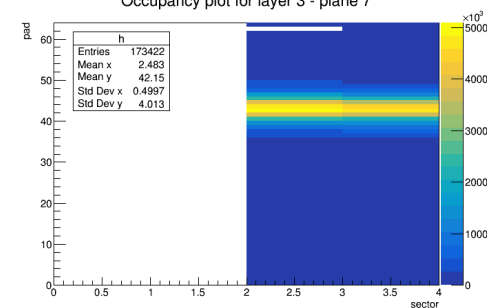
Occupancy plot for layer 1 - plane 5



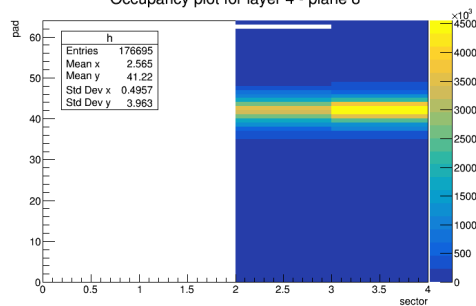
Occupancy plot for layer 2 - plane 6



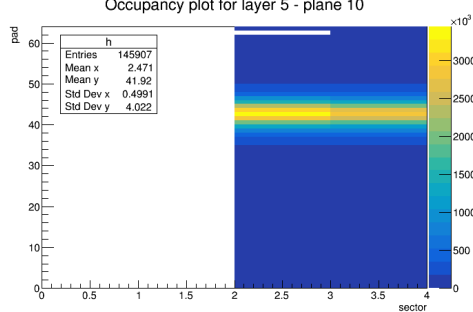
Occupancy plot for layer 3 - plane 7



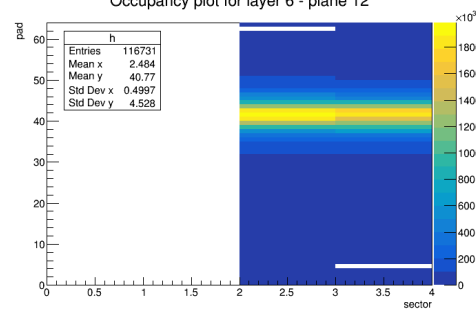
Occupancy plot for layer 4 - plane 8



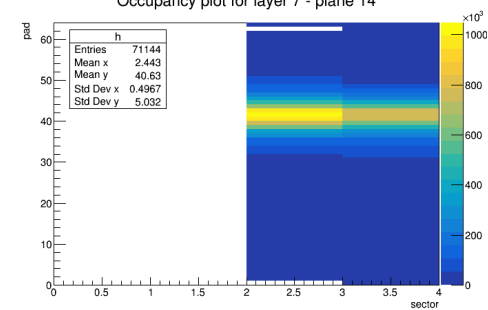
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

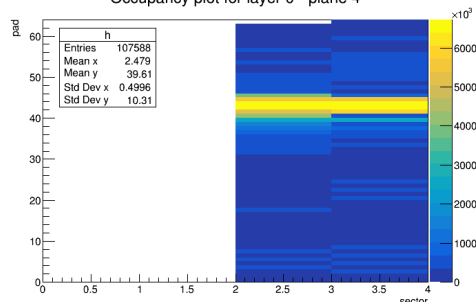


Occupancy plot for layer 7 - plane 14

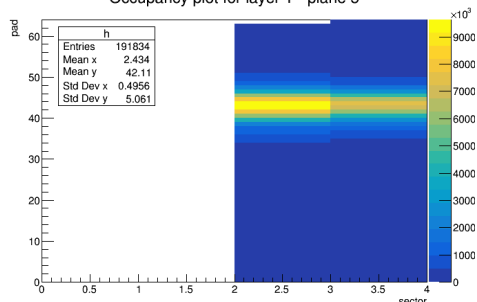


Run 22, 4 GeV, high gain

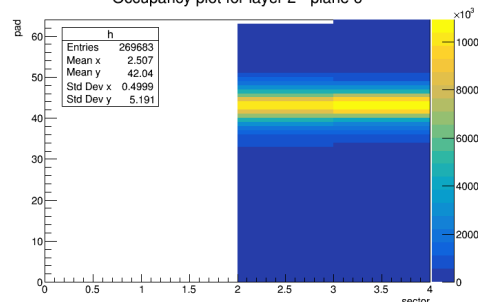
Occupancy plot for layer 0 - plane 4



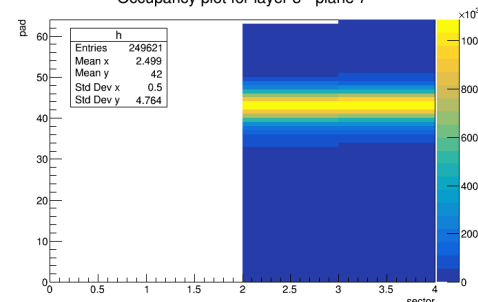
Occupancy plot for layer 1 - plane 5



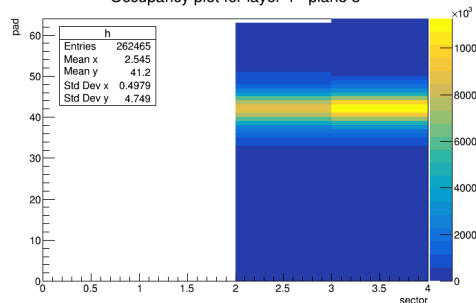
Occupancy plot for layer 2 - plane 6



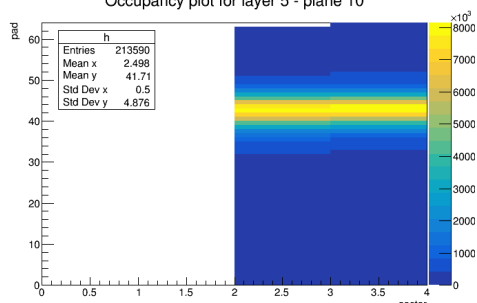
Occupancy plot for layer 3 - plane 7



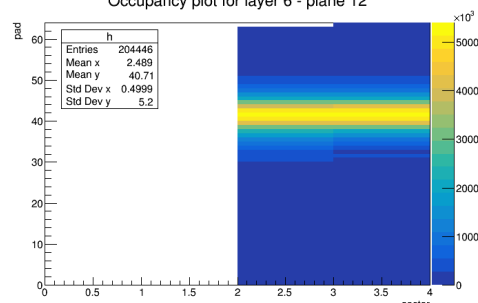
Occupancy plot for layer 4 - plane 8



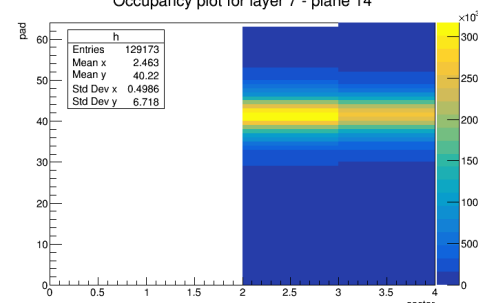
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

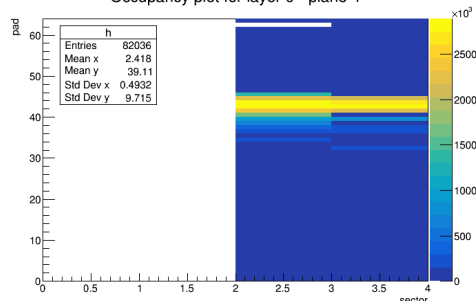


Occupancy plot for layer 7 - plane 14

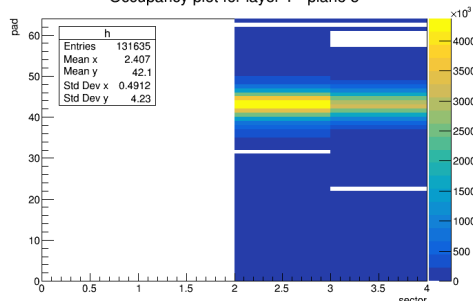


Run 22, 4 GeV, low gain

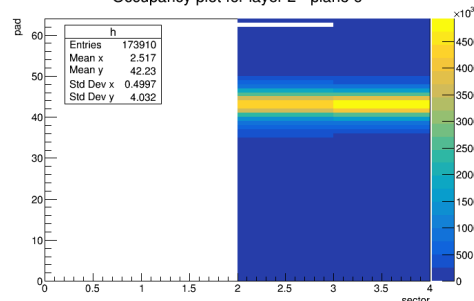
Occupancy plot for layer 0 - plane 4



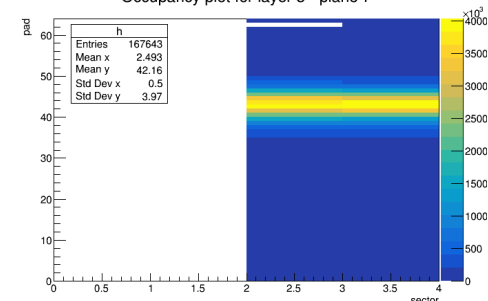
Occupancy plot for layer 1 - plane 5



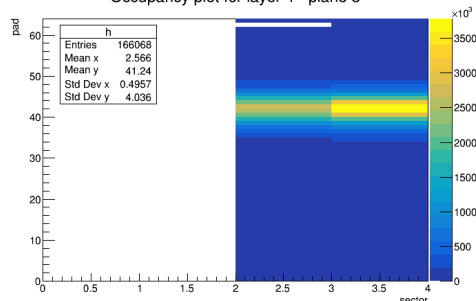
Occupancy plot for layer 2 - plane 6



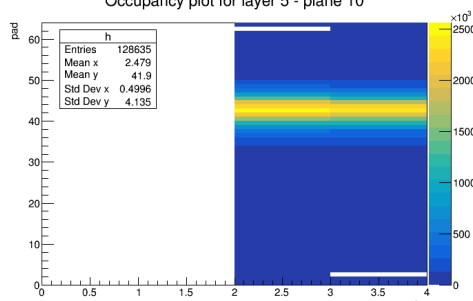
Occupancy plot for layer 3 - plane 7



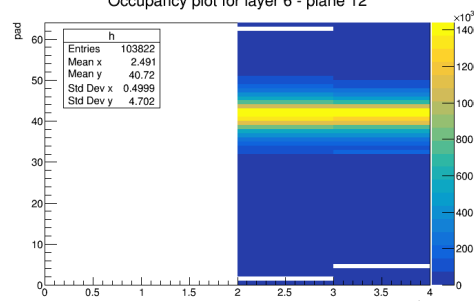
Occupancy plot for layer 4 - plane 8



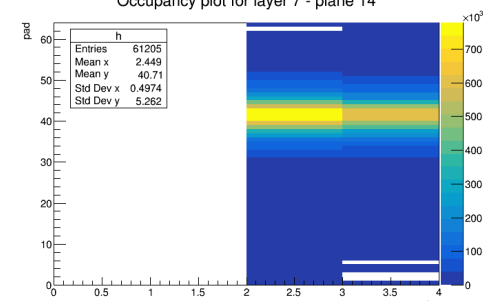
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

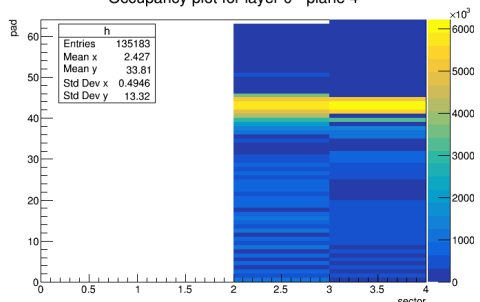


Occupancy plot for layer 7 - plane 14

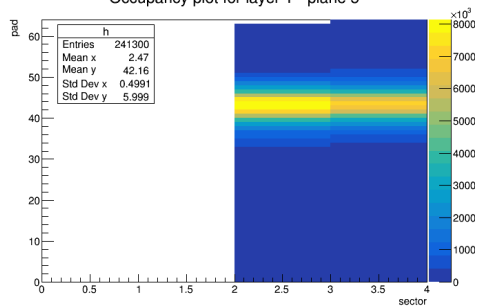


Run 32, 3 GeV, high gain

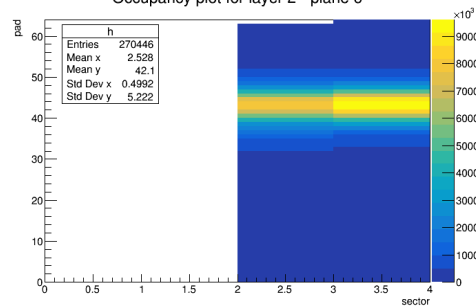
Occupancy plot for layer 0 - plane 4



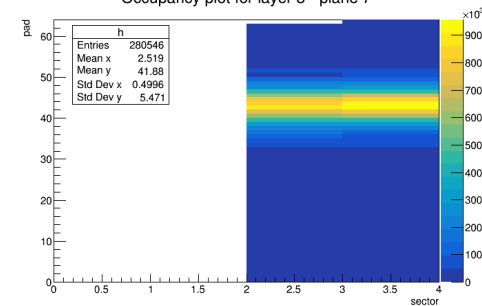
Occupancy plot for layer 1 - plane 5



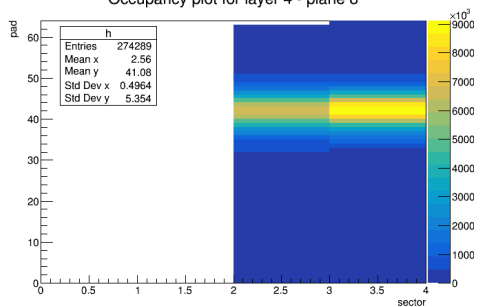
Occupancy plot for layer 2 - plane 6



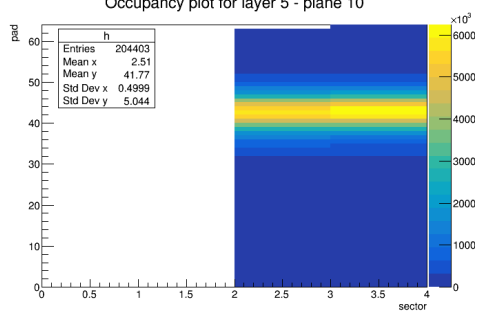
Occupancy plot for layer 3 - plane 7



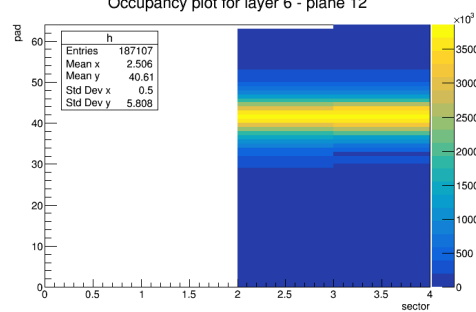
Occupancy plot for layer 4 - plane 8



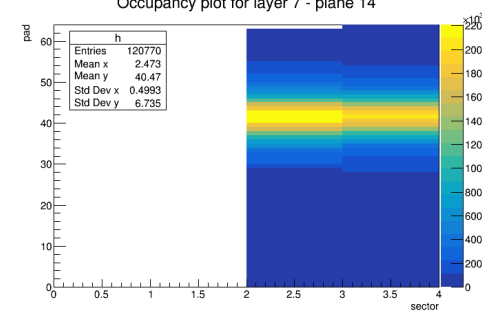
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

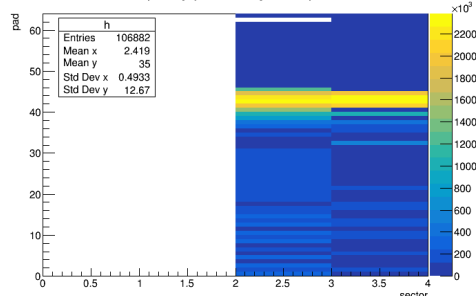


Occupancy plot for layer 7 - plane 14

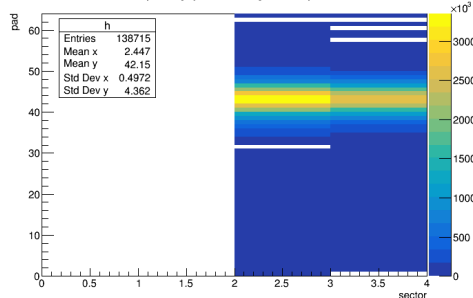


Run 32, 3 GeV, low gain

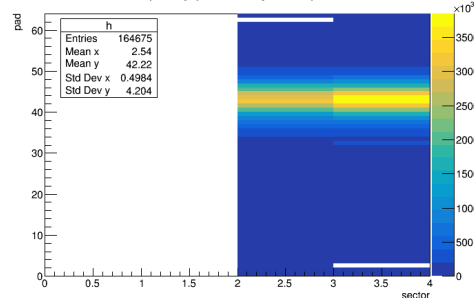
Occupancy plot for layer 0 - plane 4



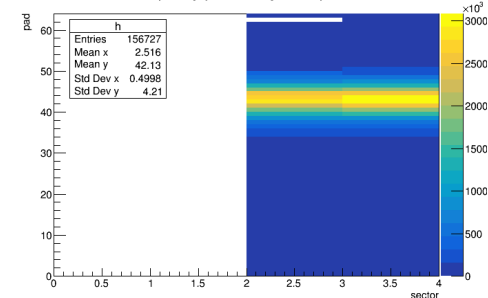
Occupancy plot for layer 1 - plane 5



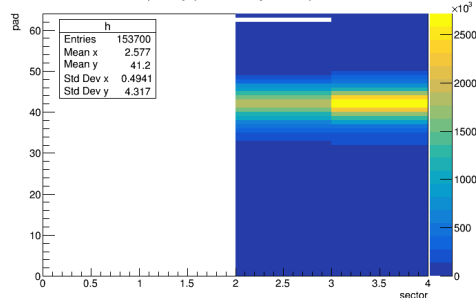
Occupancy plot for layer 2 - plane 6



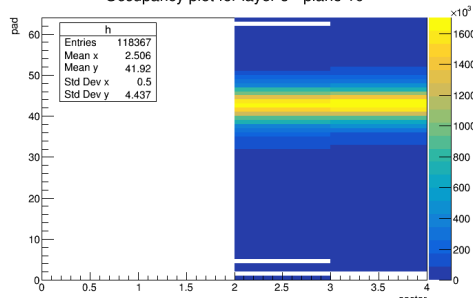
Occupancy plot for layer 3 - plane 7



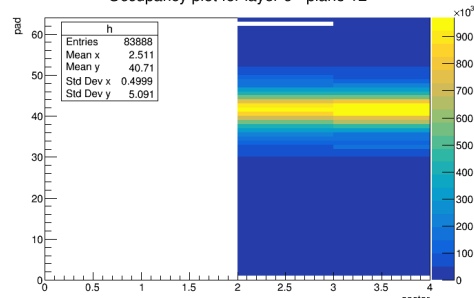
Occupancy plot for layer 4 - plane 8



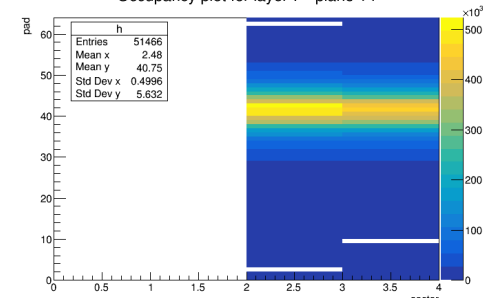
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

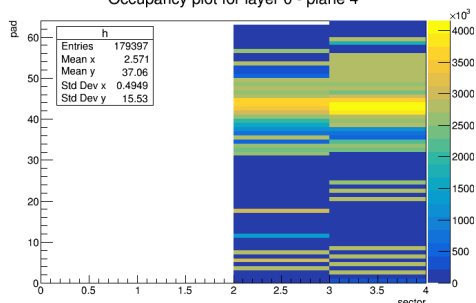


Occupancy plot for layer 7 - plane 14

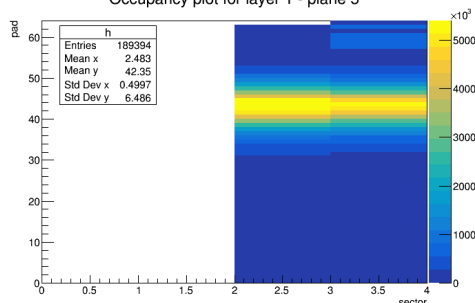


Run 36, 2 GeV, high gain

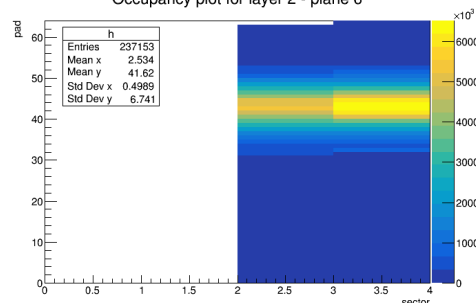
Occupancy plot for layer 0 - plane 4



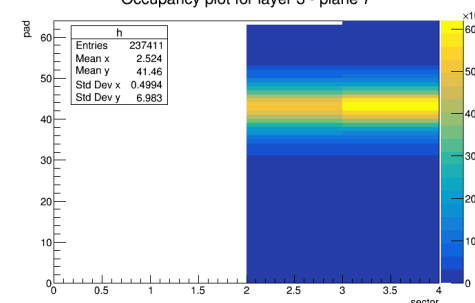
Occupancy plot for layer 1 - plane 5



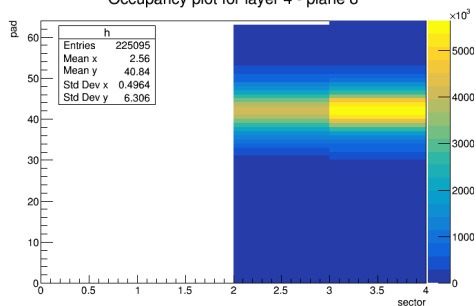
Occupancy plot for layer 2 - plane 6



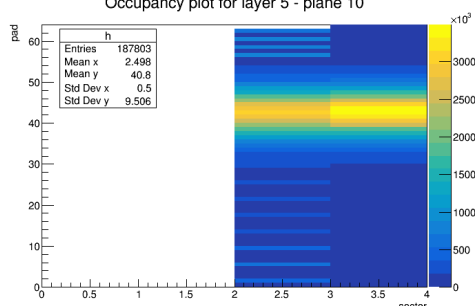
Occupancy plot for layer 3 - plane 7



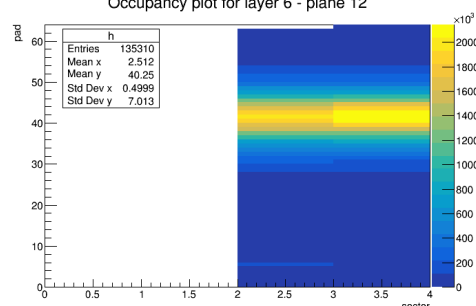
Occupancy plot for layer 4 - plane 8



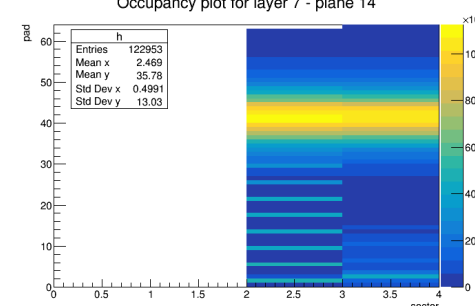
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

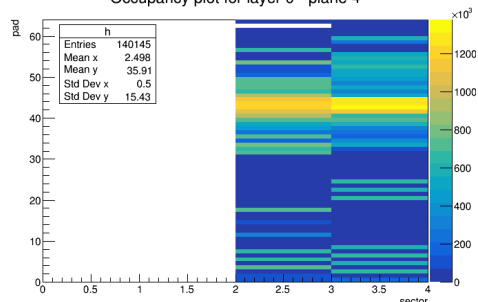


Occupancy plot for layer 7 - plane 14

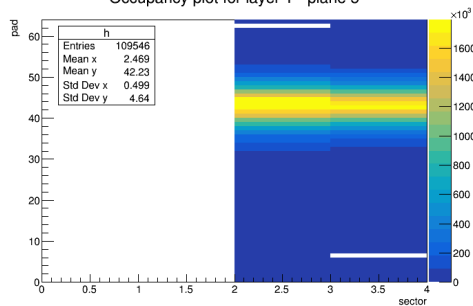


Run 36, 2 GeV, low gain

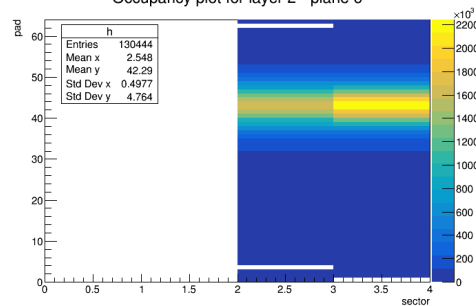
Occupancy plot for layer 0 - plane 4



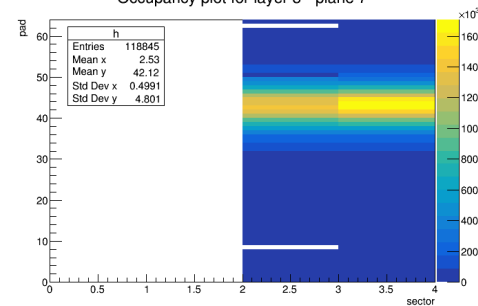
Occupancy plot for layer 1 - plane 5



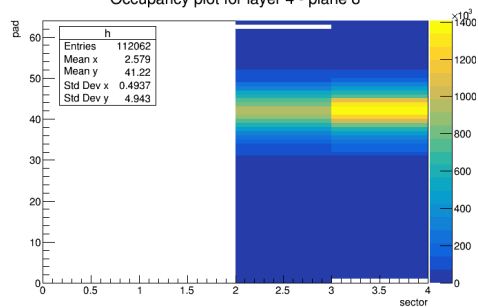
Occupancy plot for layer 2 - plane 6



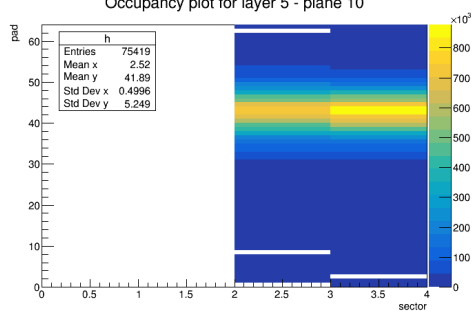
Occupancy plot for layer 3 - plane 7



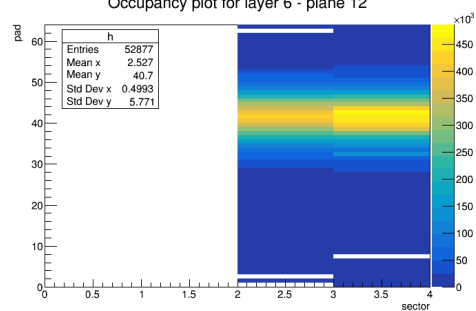
Occupancy plot for layer 4 - plane 8



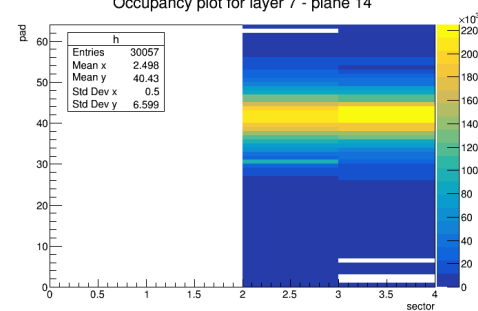
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

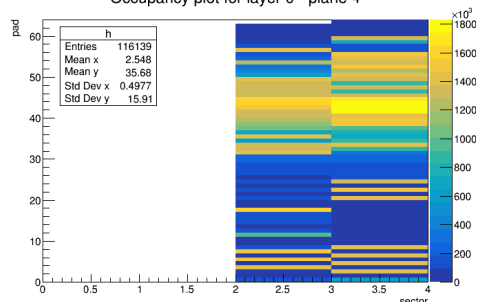


Occupancy plot for layer 7 - plane 14

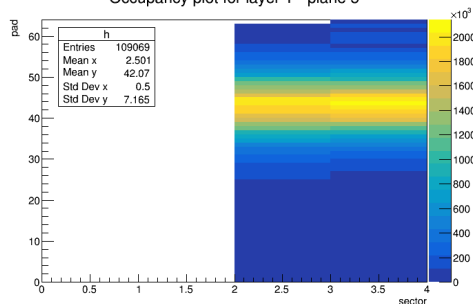


Run 46, 1 GeV, high gain

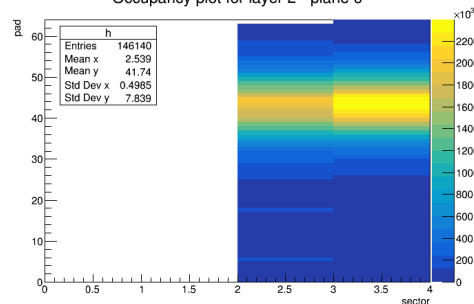
Occupancy plot for layer 0 - plane 4



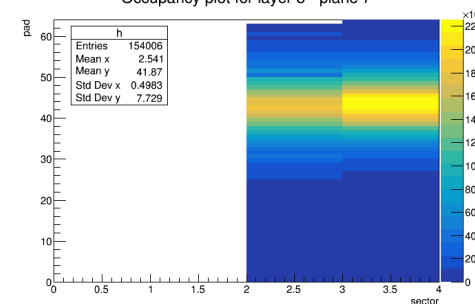
Occupancy plot for layer 1 - plane 5



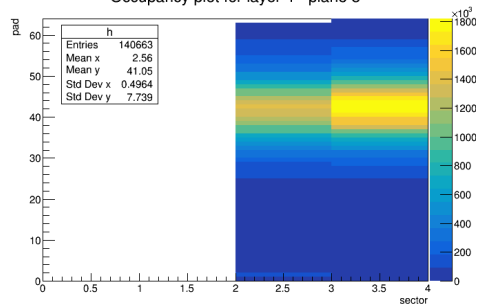
Occupancy plot for layer 2 - plane 6



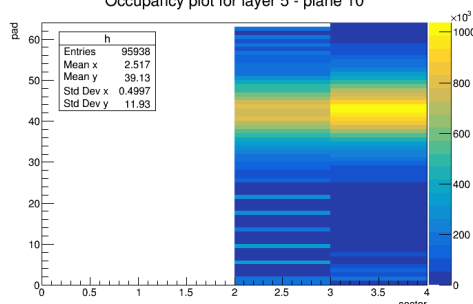
Occupancy plot for layer 3 - plane 7



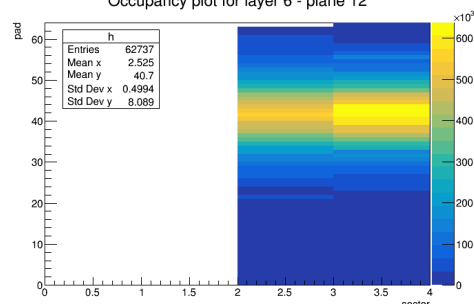
Occupancy plot for layer 4 - plane 8



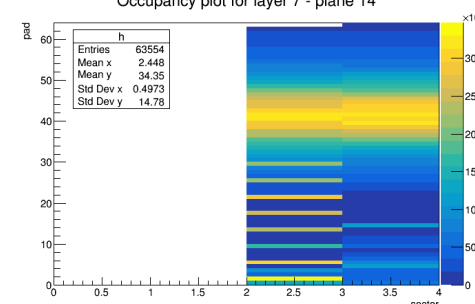
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

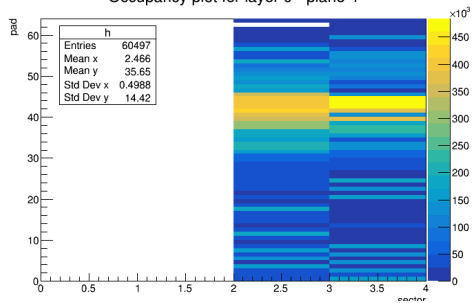


Occupancy plot for layer 7 - plane 14

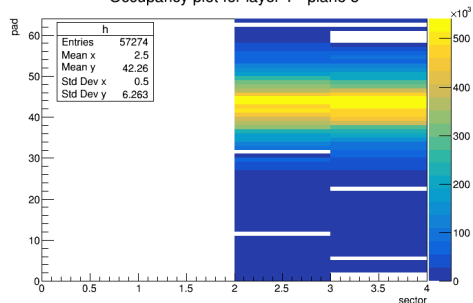


Run 46, 1 GeV, low gain

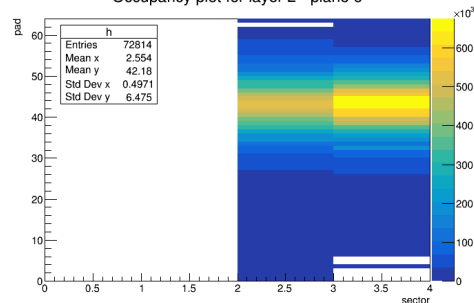
Occupancy plot for layer 0 - plane 4



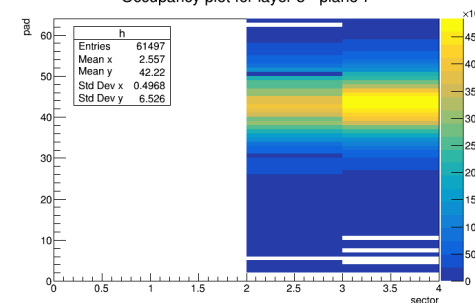
Occupancy plot for layer 1 - plane 5



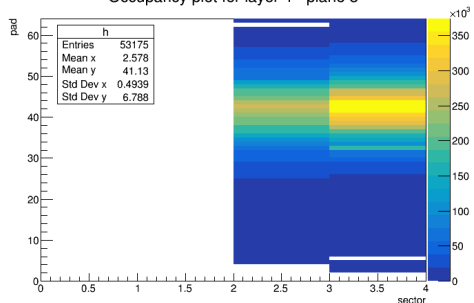
Occupancy plot for layer 2 - plane 6



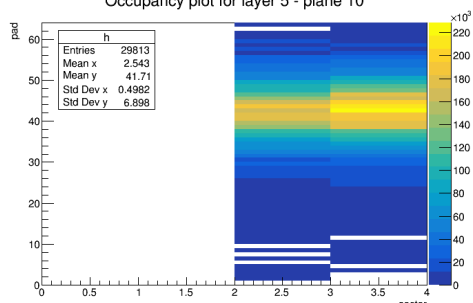
Occupancy plot for layer 3 - plane 7



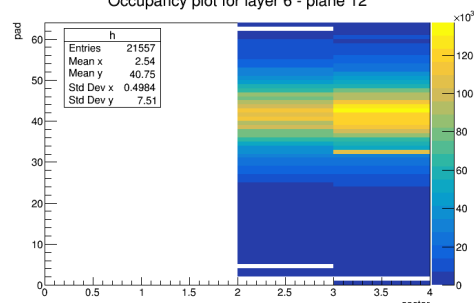
Occupancy plot for layer 4 - plane 8



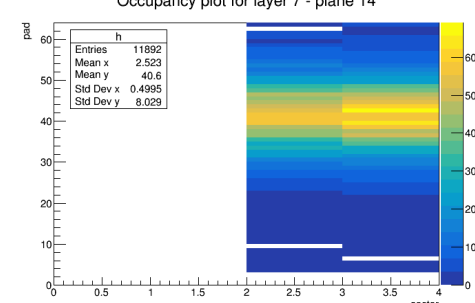
Occupancy plot for layer 5 - plane 10



Occupancy plot for layer 6 - plane 12

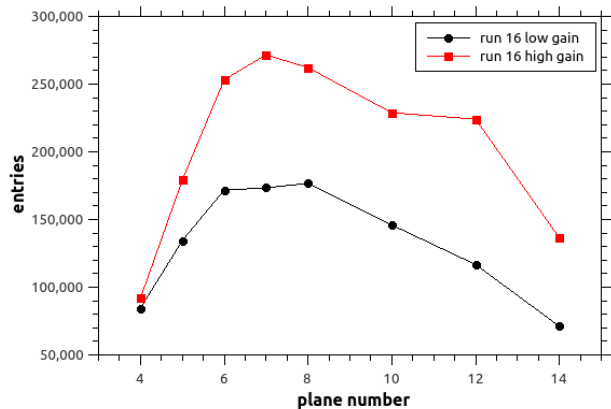


Occupancy plot for layer 7 - plane 14

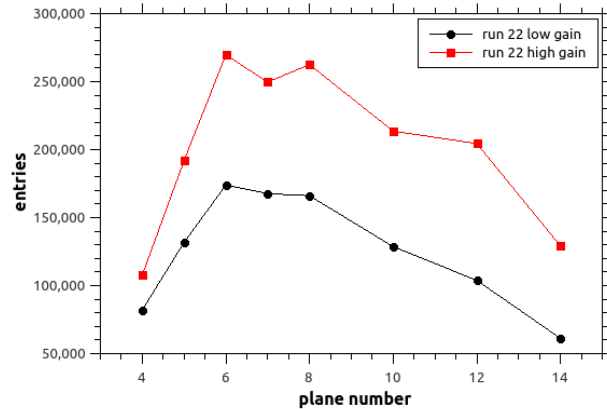


Signal propagation

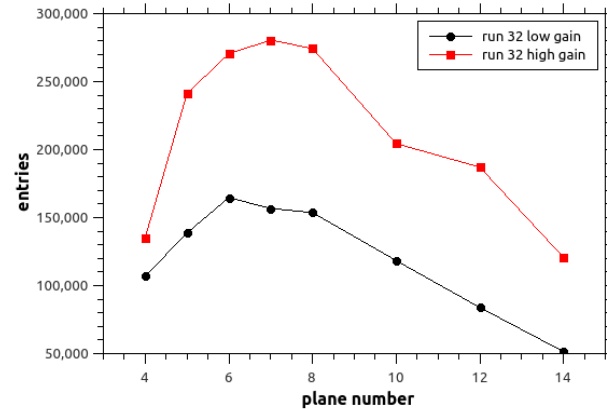
5 GeV



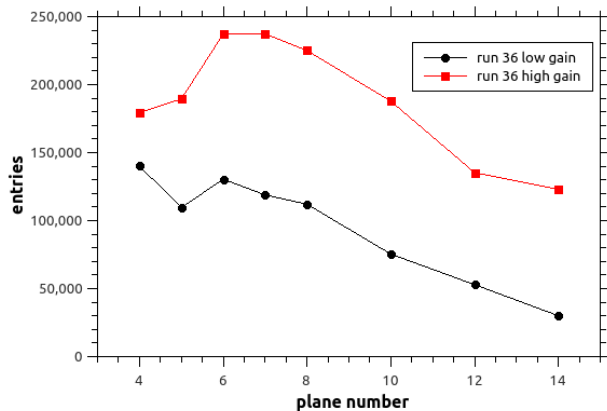
4 GeV



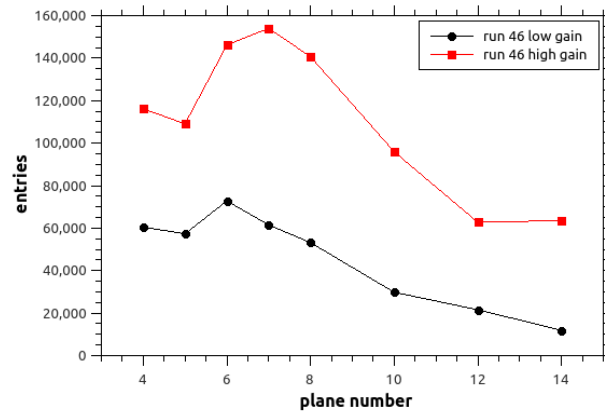
3 GeV



2 GeV



1 GeV





Thanks for your attention!