Pixel Barrel

Segmentation (input fibers to RODs)

Layer	0	1	2
Eta segmentation	13	13	13
Phi segmentation	22	38	52

13 = 6+7 for A/C sides

tota : (22+38+52)*13 = 1456 fibers

Segmentation (ROD output) for each side

Layer	0	1	2
# of RODs	22 (1phi/ROD)	19 (2phis/ROD)	13 (4phis/ROD)

total : (22+19+13) = 54 RODs / side

(A/C both sides : 108 RODs)

Pixel Endcap

Segmentation (input fibers to RODs)

Disk	0	1	2
Eta segmentation	2	2	2
Phi segmentation	48	48	48

2 = 1+1 for A/C sides

tota : (22+38+52)*13 = 1456 fibers

Segmentation (ROD output) for each side

Disk	0 + 2	1
# of RODs	8 (6phis/ROD)	4 (12phis/ROD)

total : (8+4) = 12 RODs / side

(A/C both sides : 24 RODs)

SCT Barrel

Segmentation (input fibers to RODs)

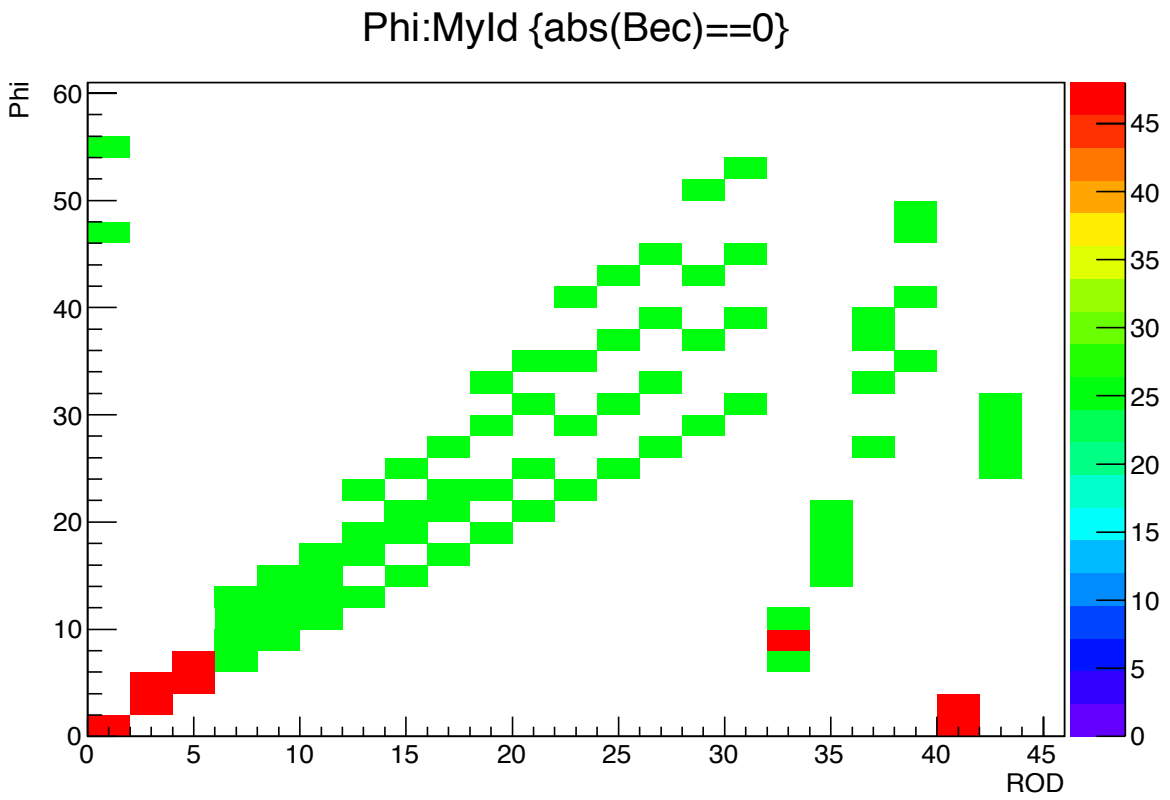
Layer	0	1	2	3
ta segmentatio	12	12	12	12
hi segmentatio	32	40	48	56

12 = 6+6 for A/C sides

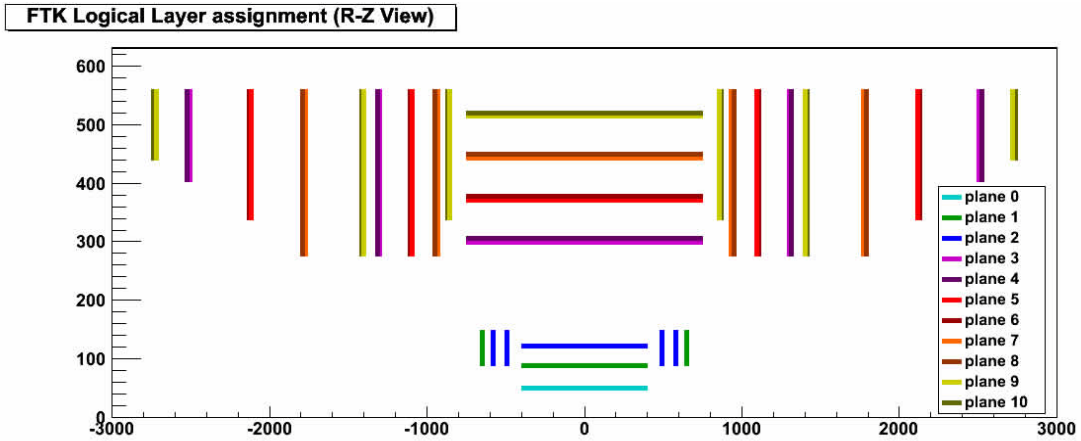
total : (32+40+48+56)*12*2=4224 fiberes

The factor 2 is for sublayers (stereo-angle)

Data from 176phis are read by 44 RODs (4phis/ROD)



SCT Endcap (9 disks / side)

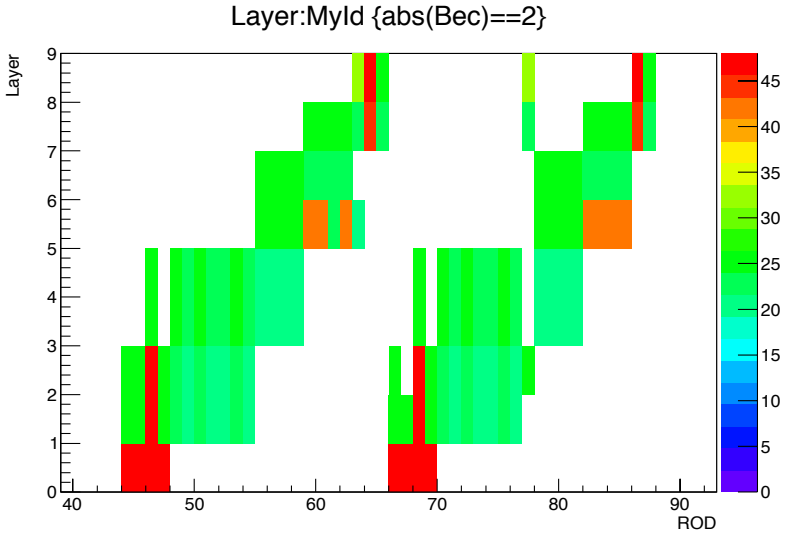


Segmentation (input fibers to RODs)

Disk	0	1	2	3	4	5	6	7	8
Eta segmentation	2	3	3	3	3	3	2	2	1
Phi segmentation	52 / 40	52 / 40	52 / 40	52 / 40	52 / 40	52 / 40	52 / 40	52 / 40	52

52 / 40	52 from Eta0, 40 from Eta1 and Eta2
52 / 40	52 from Eta0, 40 from Eta1

Total : (52*9 + 40*13) * 2 (A/C) * 2 (sub layer) = 3952 fibers



Segmentation ROD for each side

Corresponding to eta, the readout segments are defined.

(Low eta --> high eta)

4 RODs	readout for Disk0, 1, 2
7 RODs	readout for Disk1, 2, 3, 4, 5
4 RODs	readout for Disk4, 5, 6, 7
4 RODs	readout for Disk5, 6, 7
3 RODs	readout for Disk7, 8