

# *SiD background simulations*

*Update on time evolution of particle origins maps  
&  
EcalEndcap cells with full buffer*

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DESY

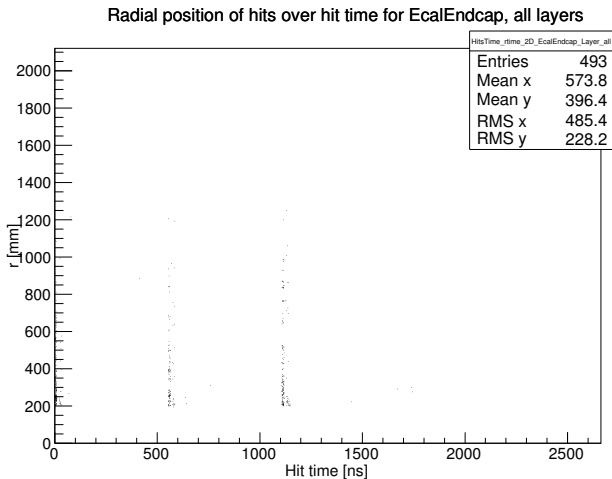
24. Februar 2016

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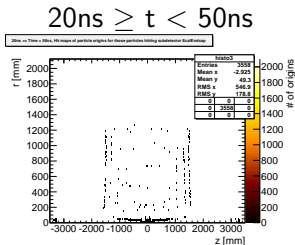
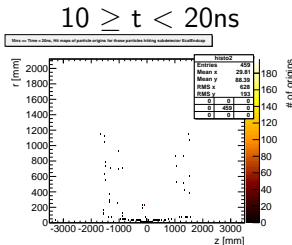
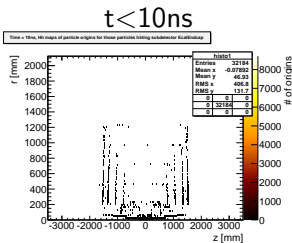
# Time evolution of particle origins maps

Plot from last time:



# Time evolution of particle origins maps

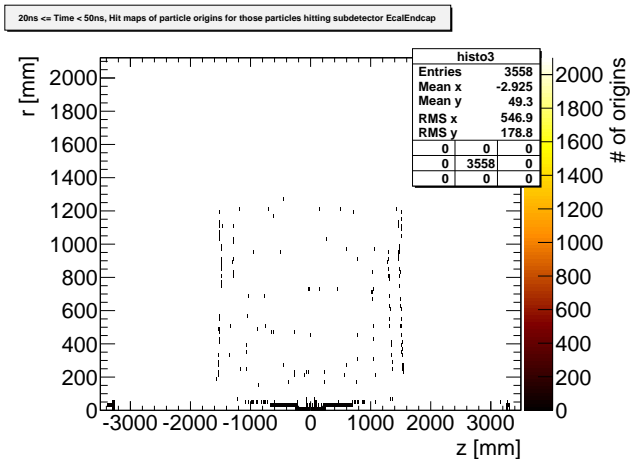
Maps of particle origins of those particles hitting the EcalEndcaps, for the time intervals:



Simulated are 200 bunches.

# Time evolution of particle origins maps

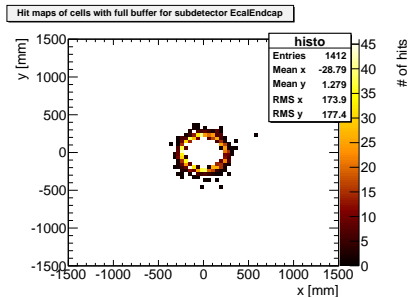
$20\text{ns} \geq t < 50\text{ns}$



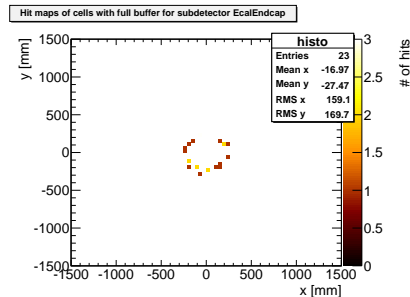
# Hit maps of the EcalEndcaps for cells with full buffer

Simulated are 2500 bunches.

Only the cells that are **hit 4/6 or more times** are drawn.



Left: Dead cells for  
buffer depth of 4  
for 2500 bunches

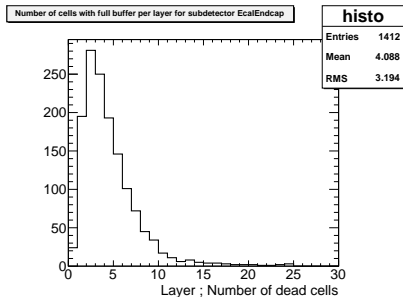


Right: Dead cells for  
buffer depth of 6  
for 2500 bunches

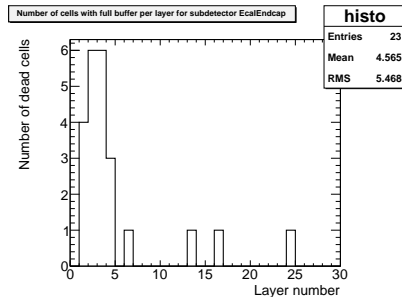
# Dead cells of the EcalEndcaps per layer for different buffer depths

Simulated are 2500 bunches.

Only the cells that are **hit 4/6 or more times** are drawn.



Left: Dead cells for  
buffer depth of 4,  
for 2500 bunches



Right: Dead cells for  
buffer depth of 6,  
for 2500 bunches