

SIMULATIONS OF RICH PROTOTYPE

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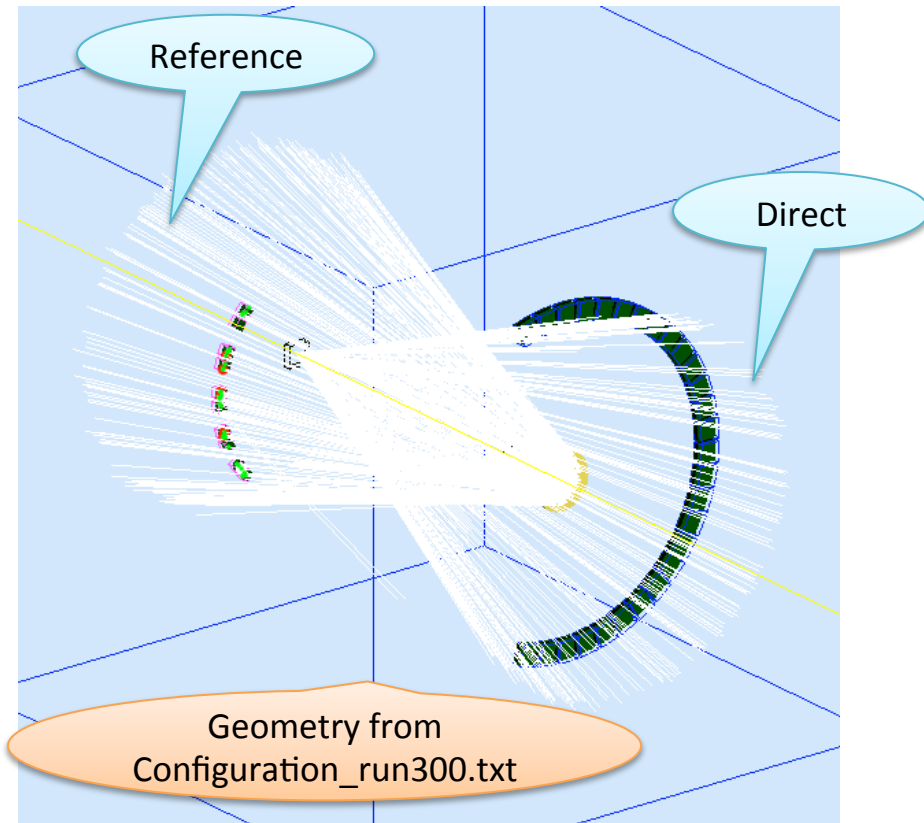
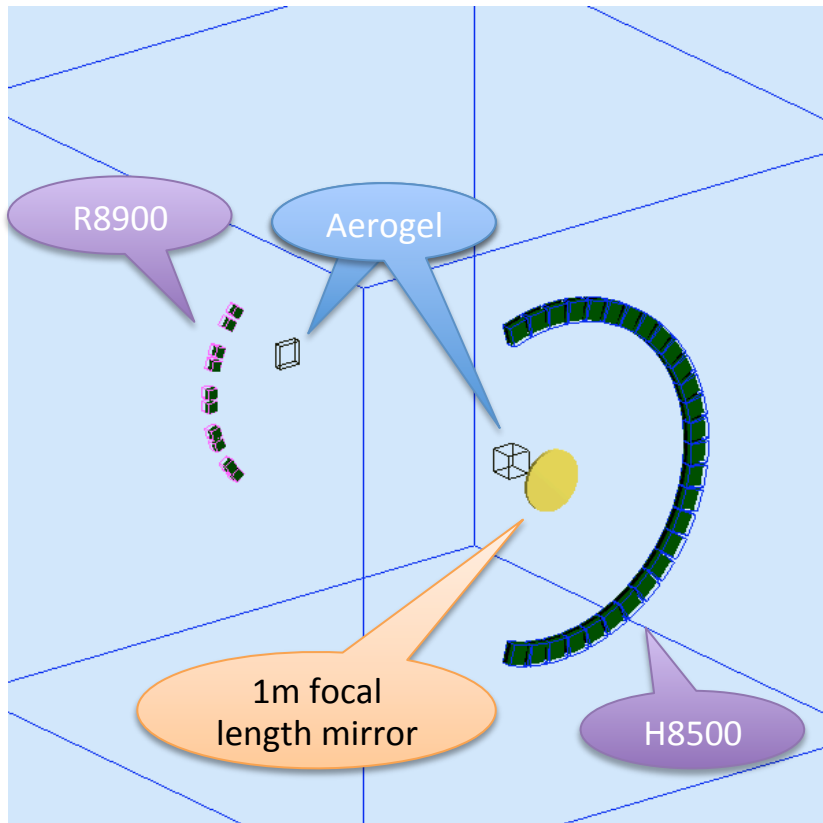
Direct Ring

Goal: test the RICH response at maximum momentum
Verify Cherenkov Angle Resolution and Rayleigh Background

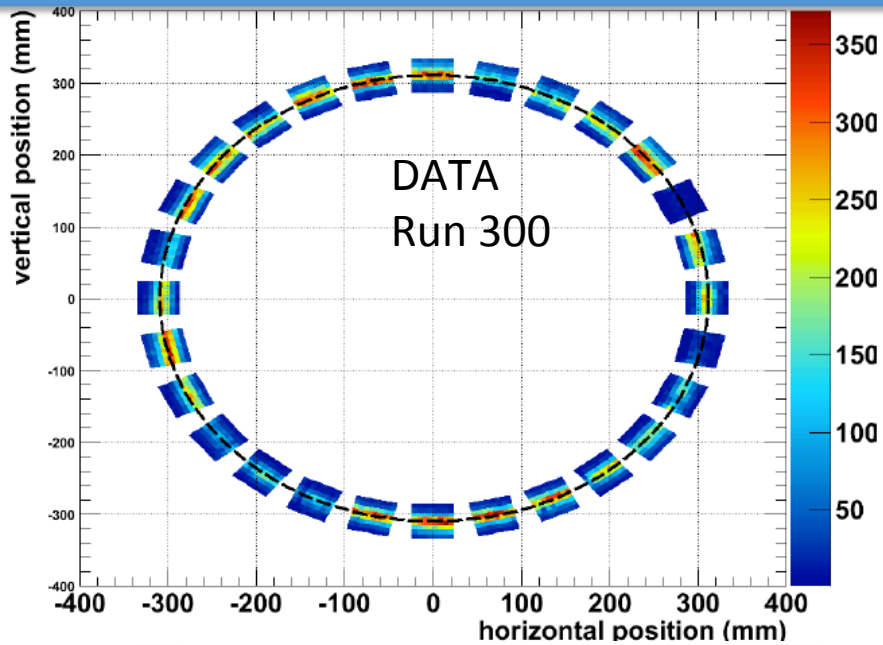
Reference (ideal):
 $n=1.04-1.06$, 6 cm thick aerogel
Focalizing mirror
R8900 designed for single photon



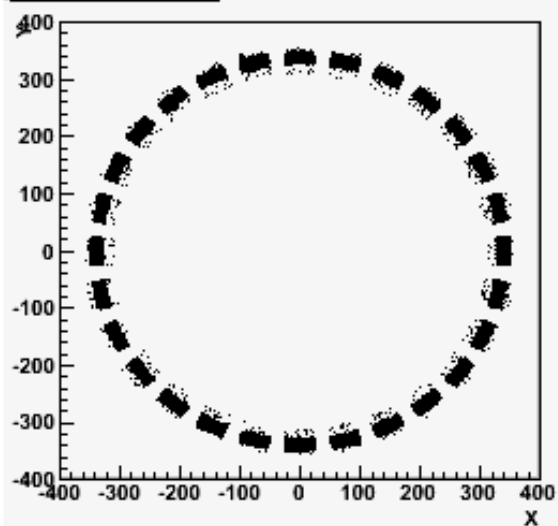
Proximity focusing RICH (realistic):
 $N=1.04-1.06$, 2 cm thick aerogel
100 cm gap
H8500 as photon detector



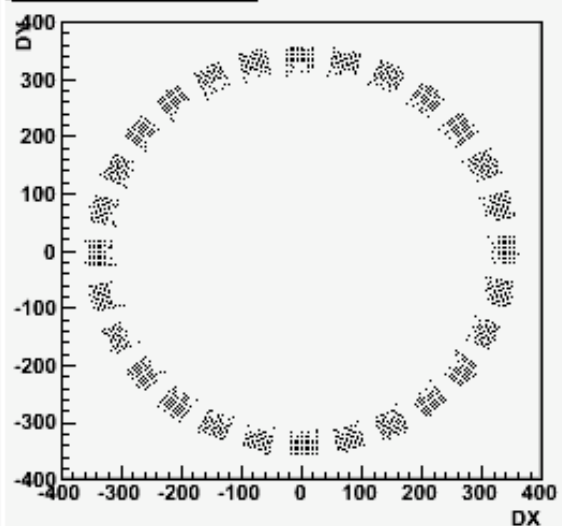
Event Display



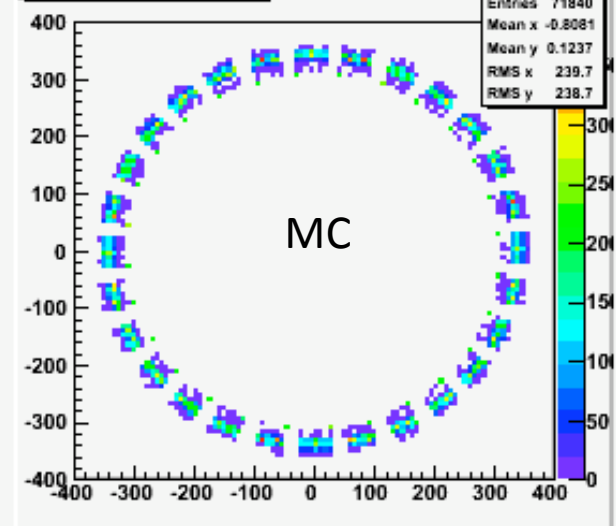
Y:X {abs(r)<500}



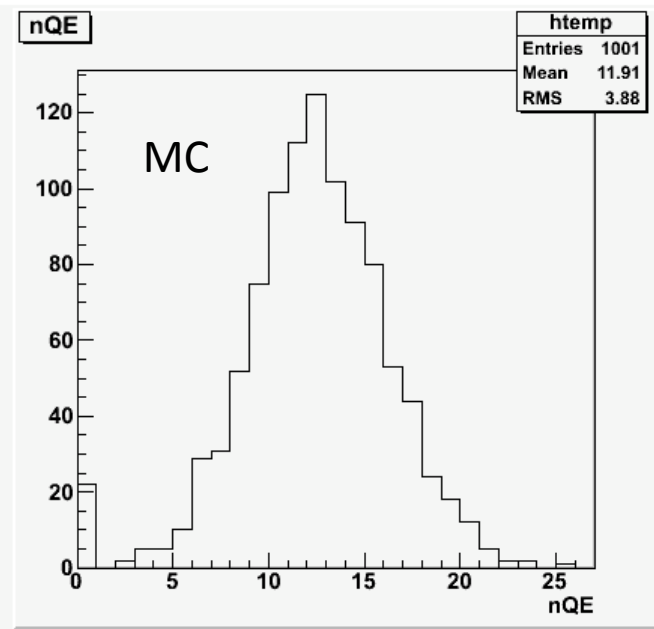
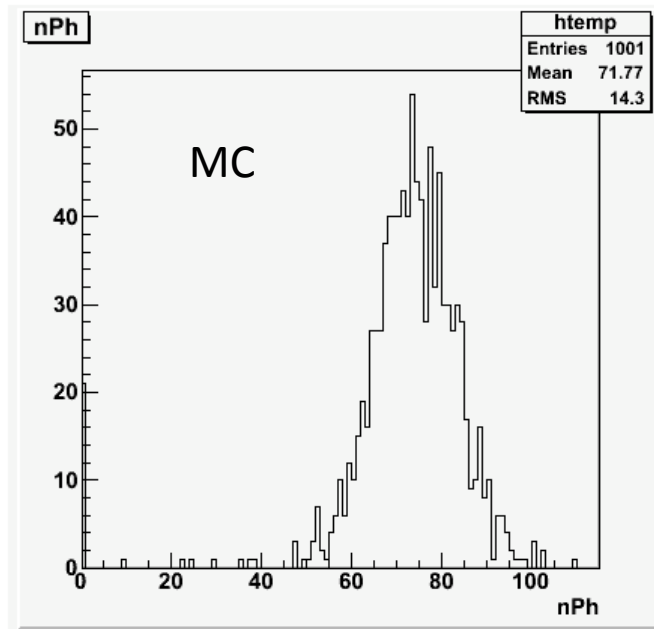
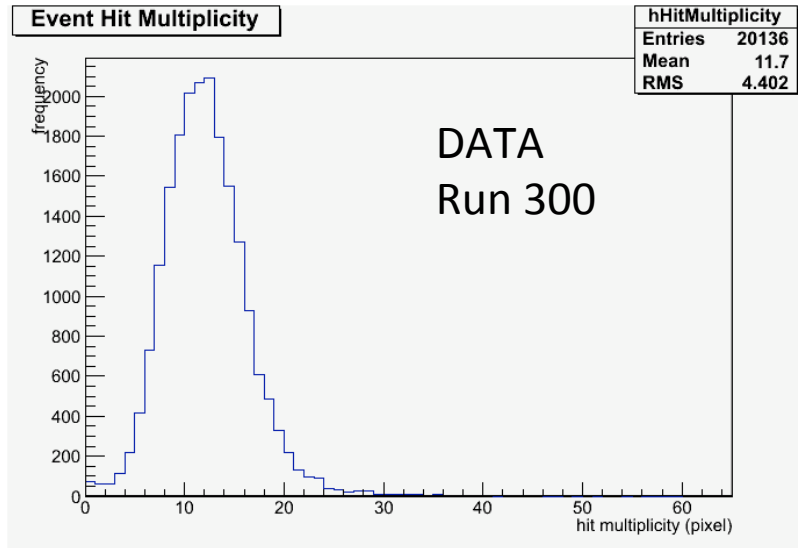
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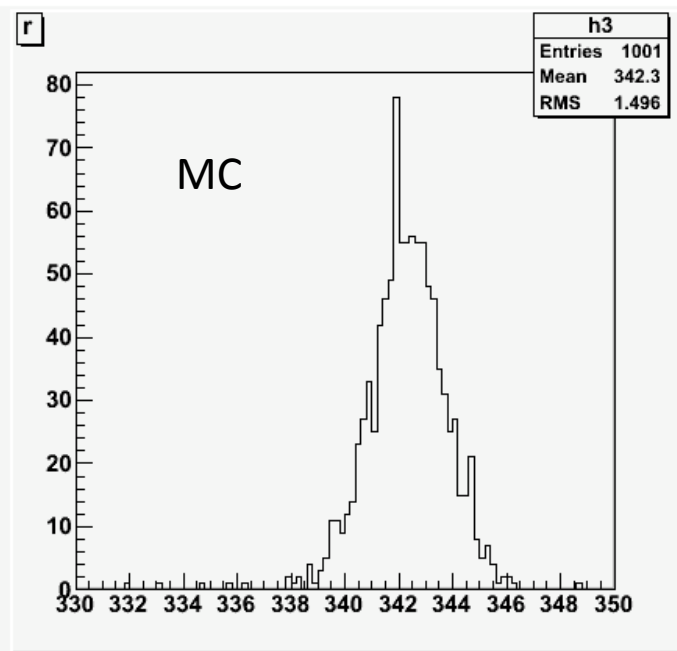
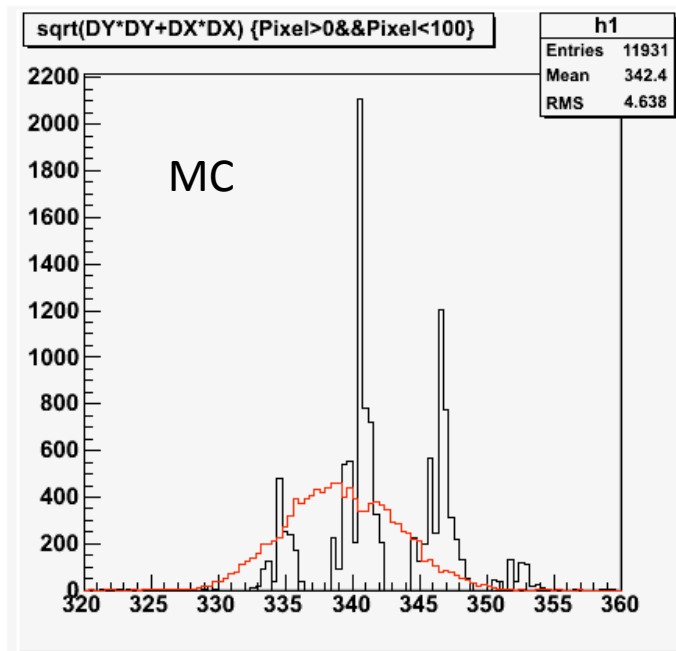
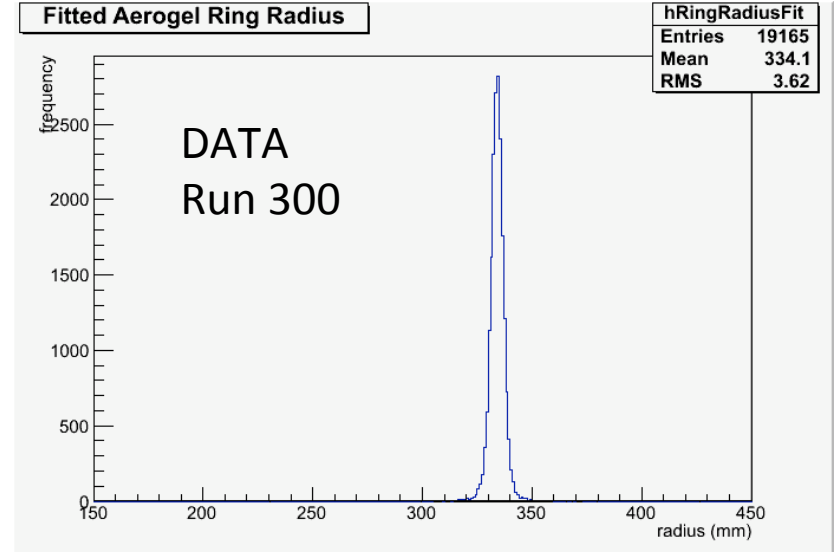
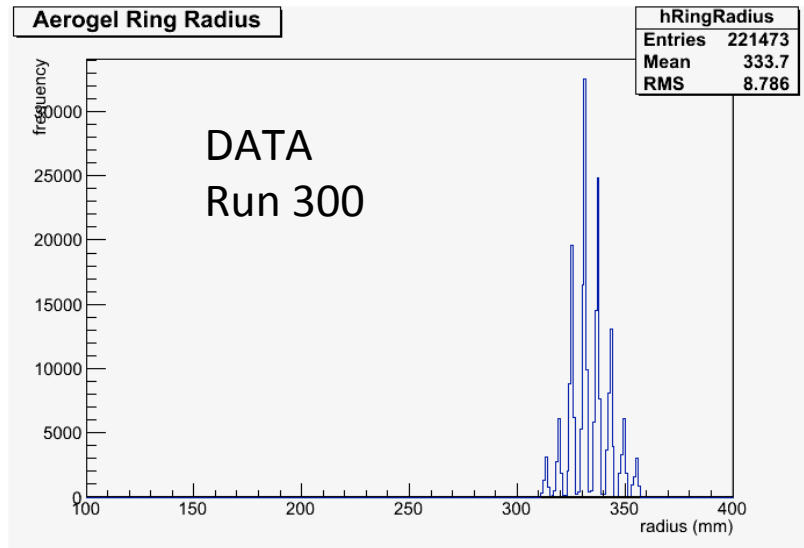
DY:DX {abs(r)<500}



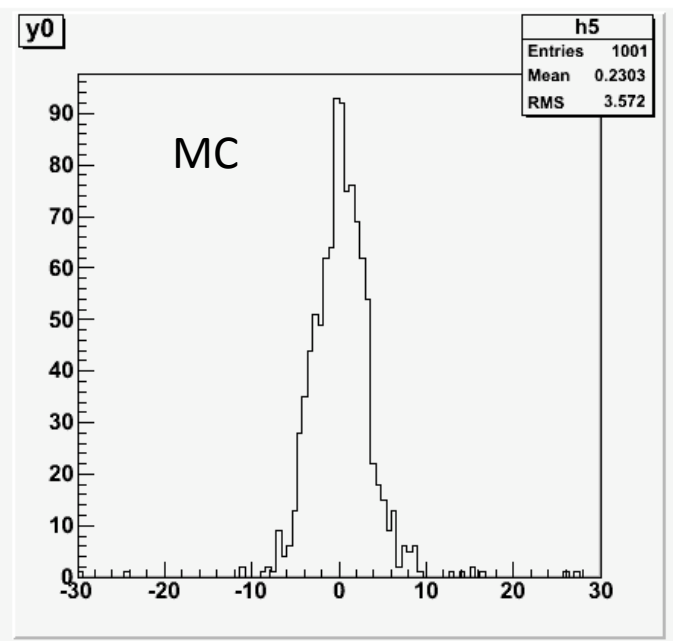
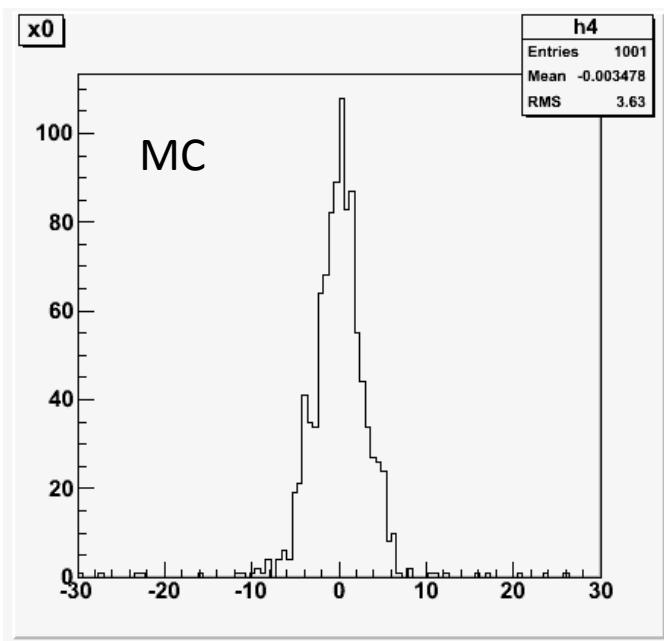
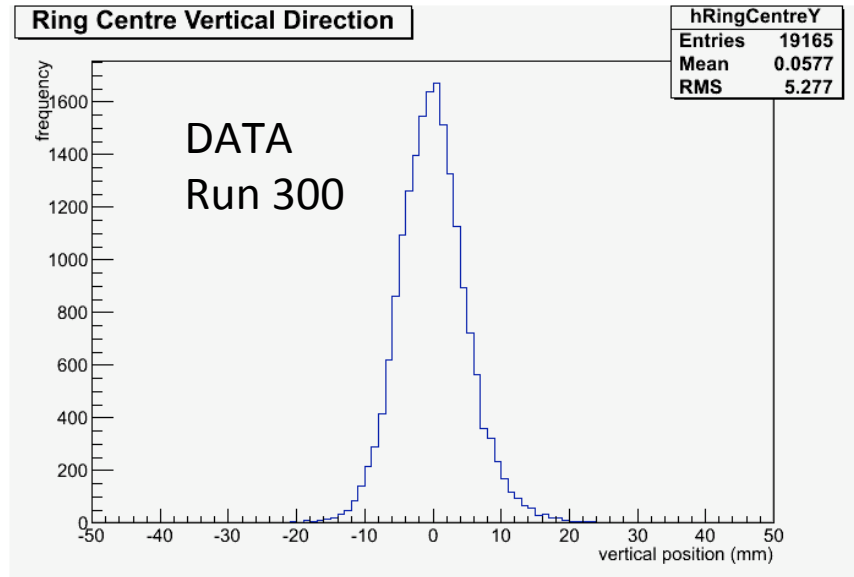
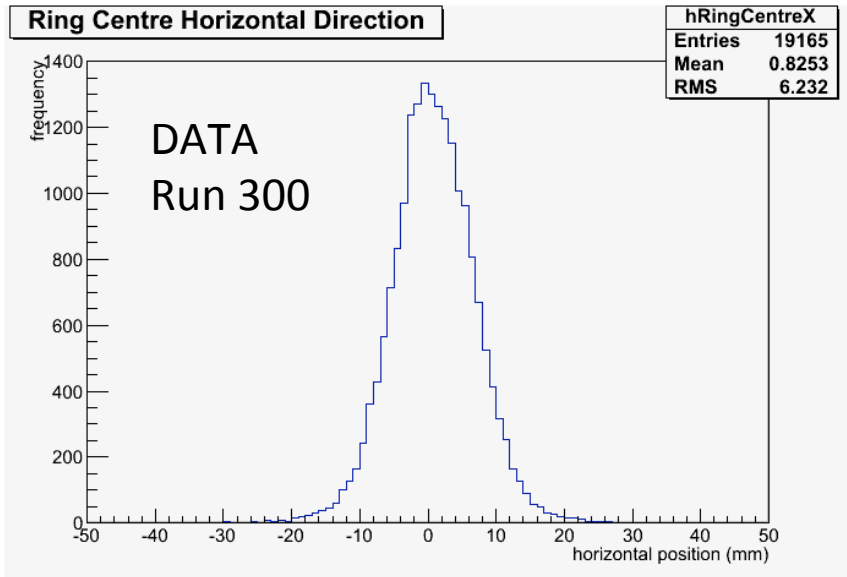
Event Multiplicity



Digitized and Fitted Ring Radius



Fitted Ring Center



Hit Distribution

DATA
Run 300

Aerogel Cherenkov Ring Image

