

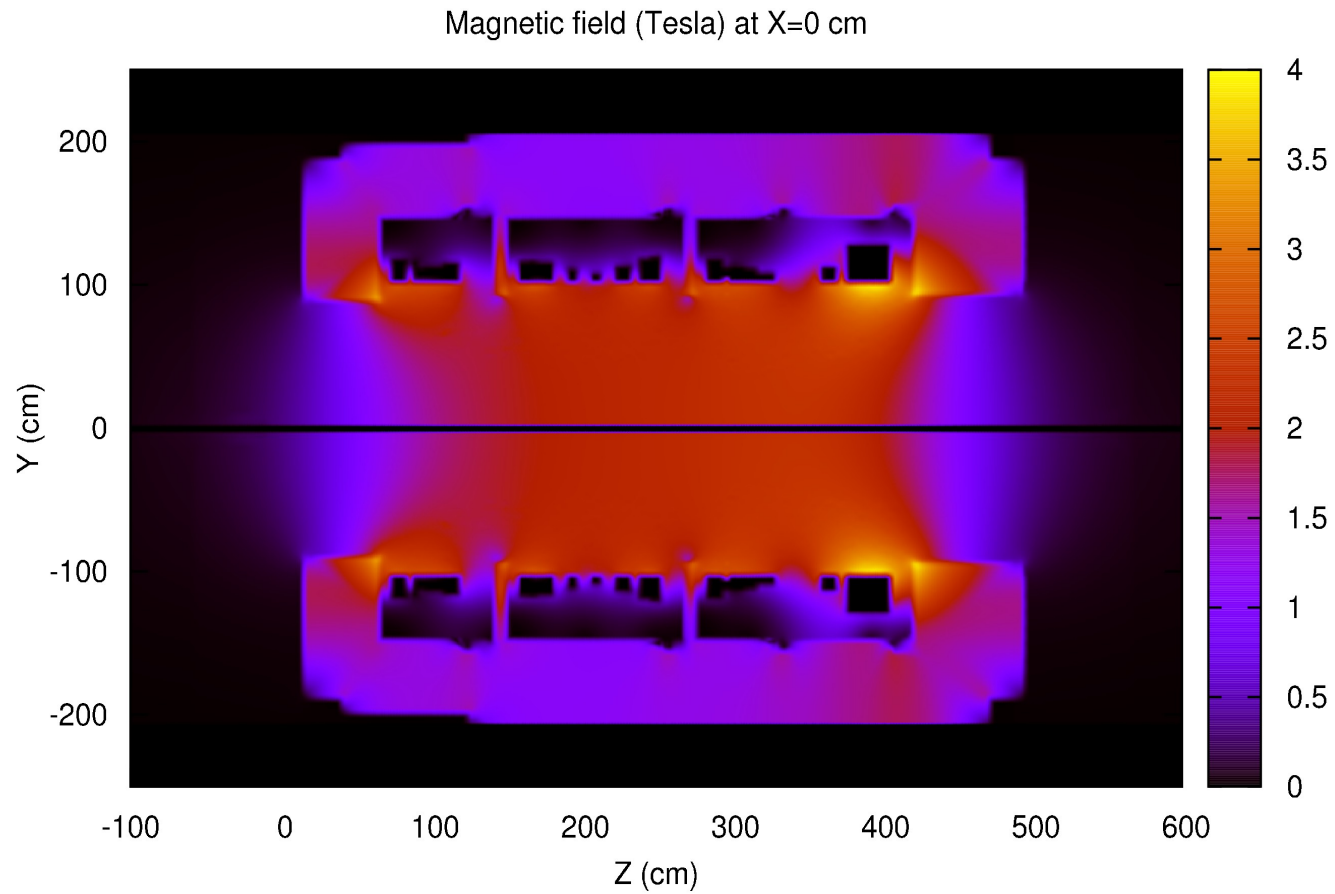
**BCAL Dynamic Range**  
**from the Simulation with FLUKA**

Irina Semenova, Andrei Semenov

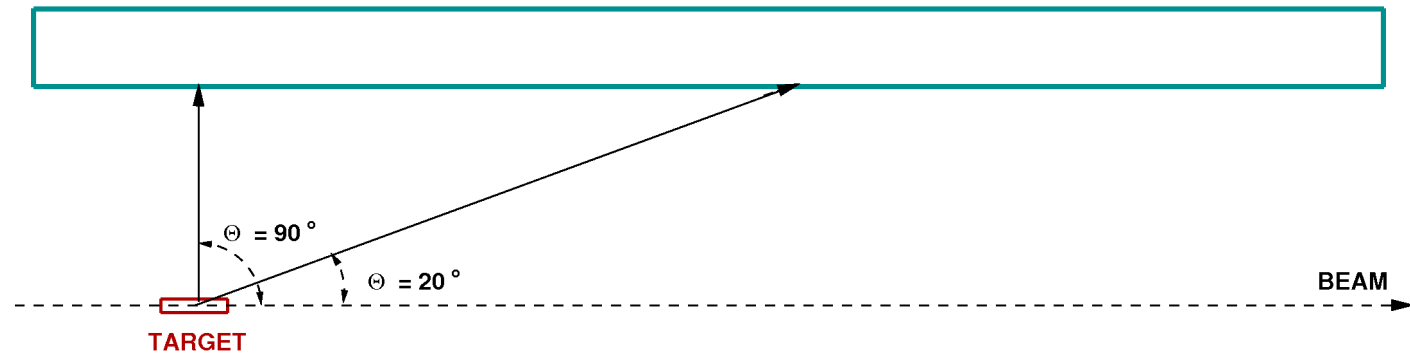
U. of Regina

# Field Map ANSYS 20081209-1\_150.dat

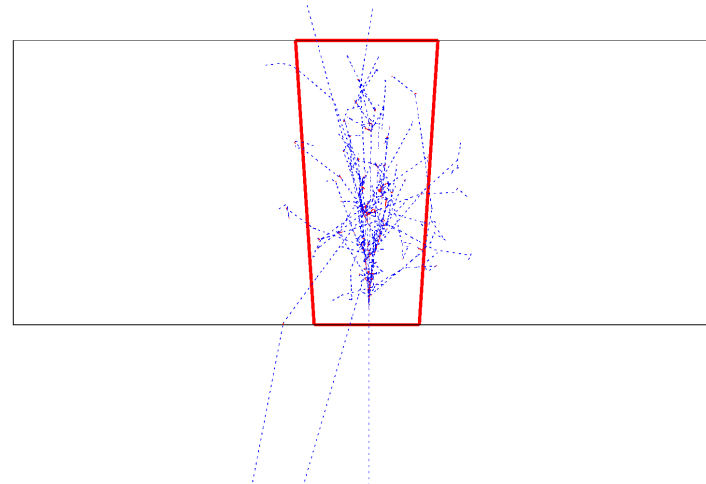
## Linear interpolation between grid points



## Geometry: Side View

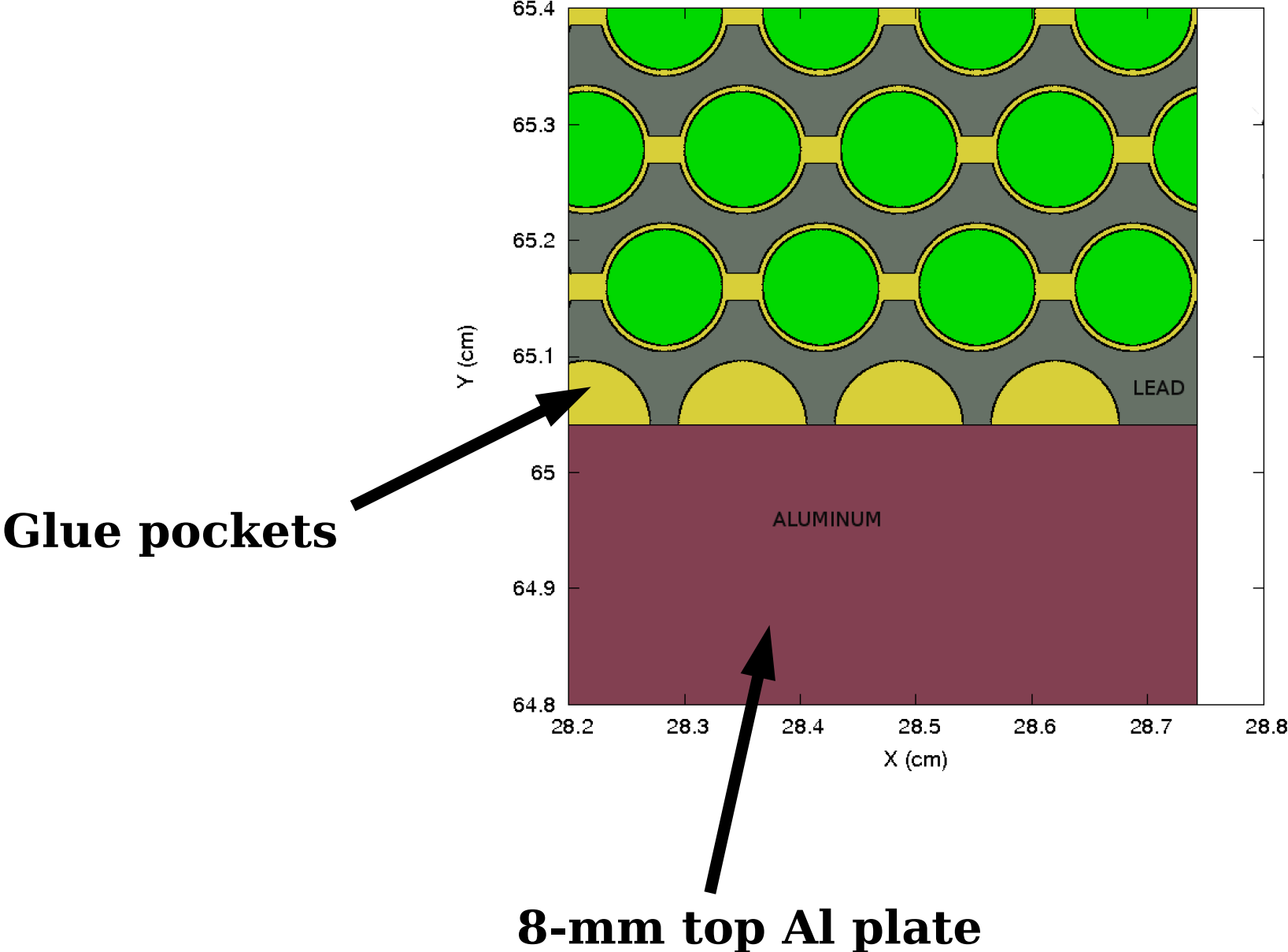


## Geometry: Front View

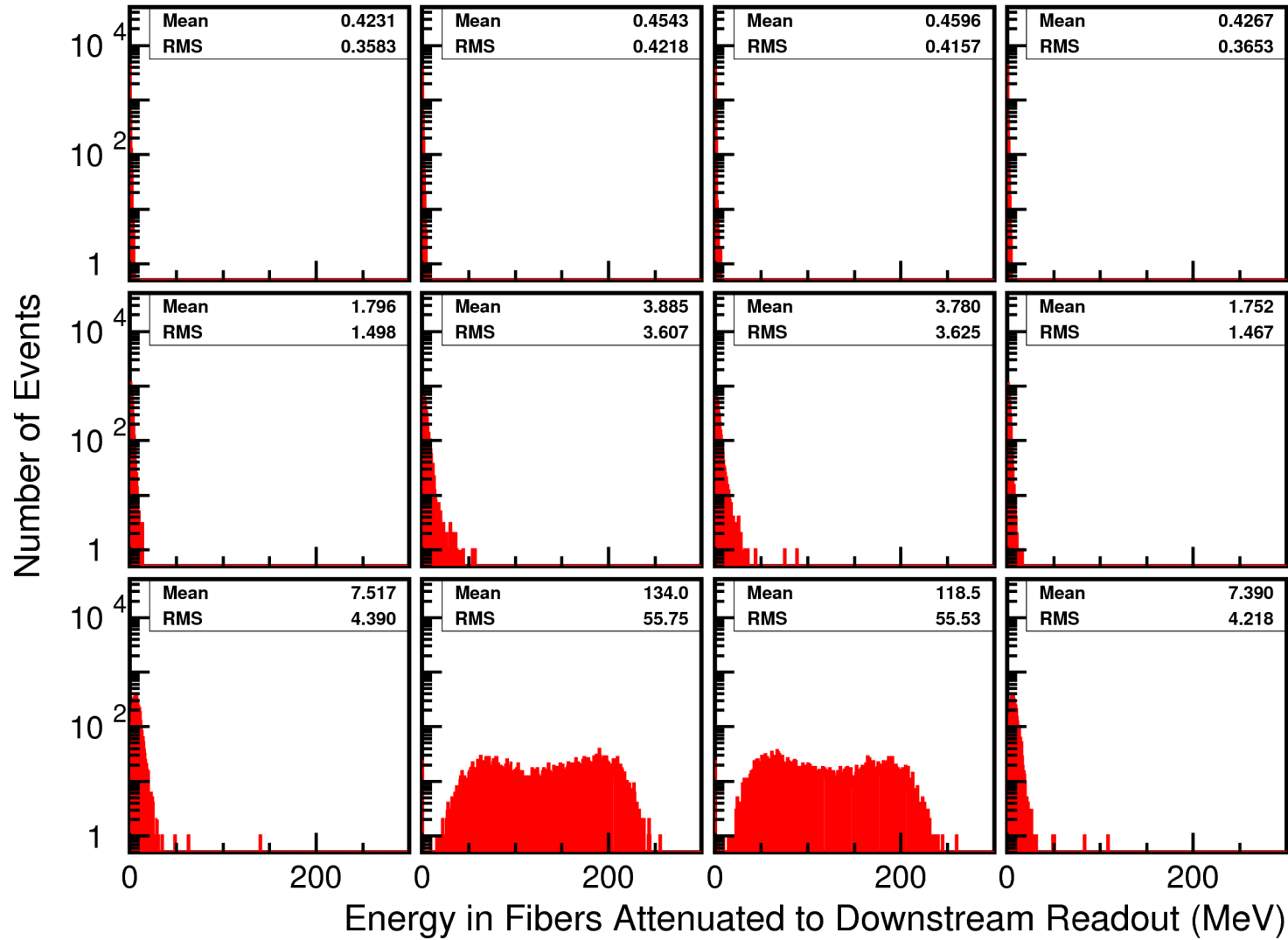


**Attenuation with 2-exponent function (530 & 91 cm)**

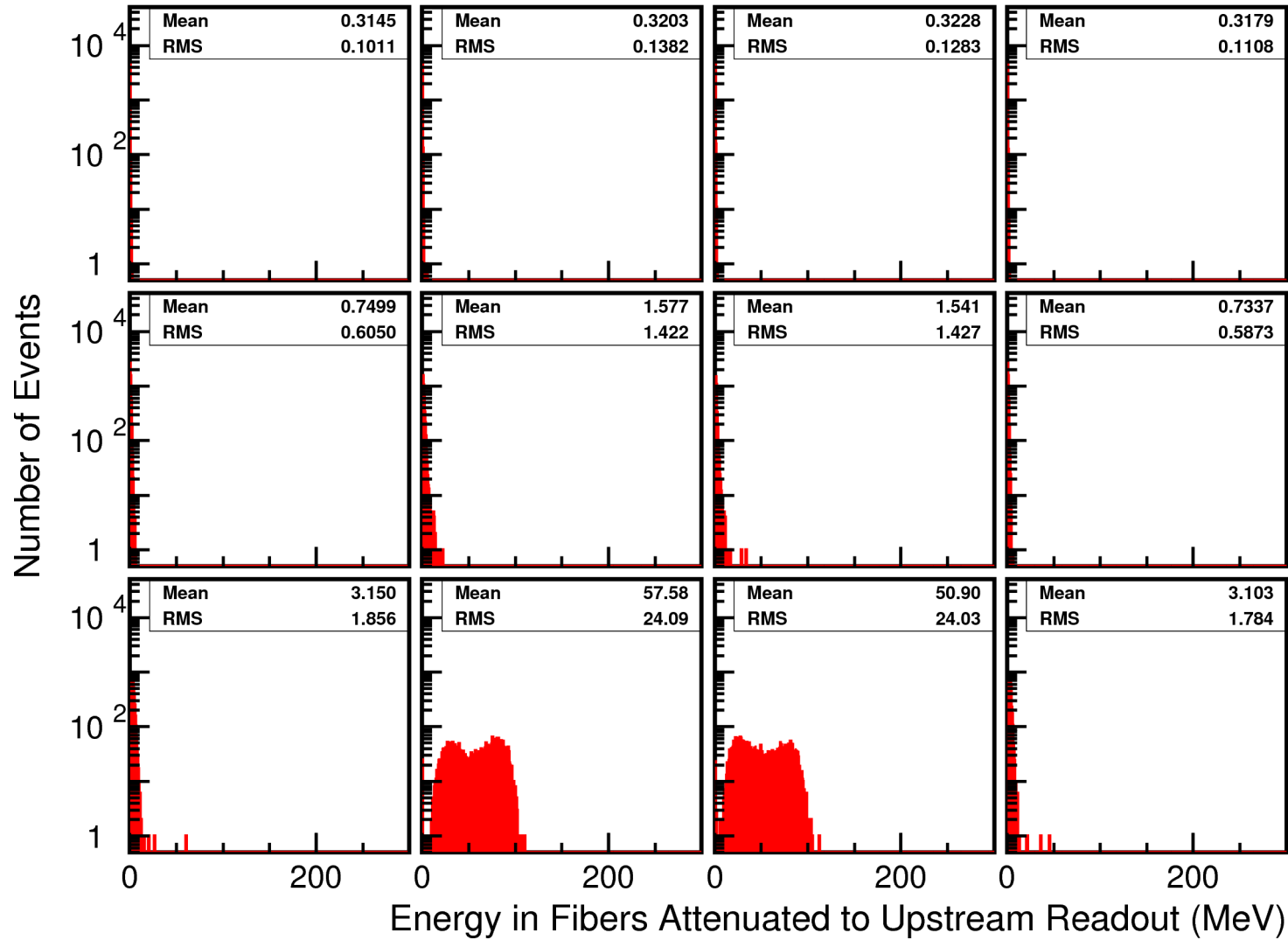
# Realistic BCAL Geometry



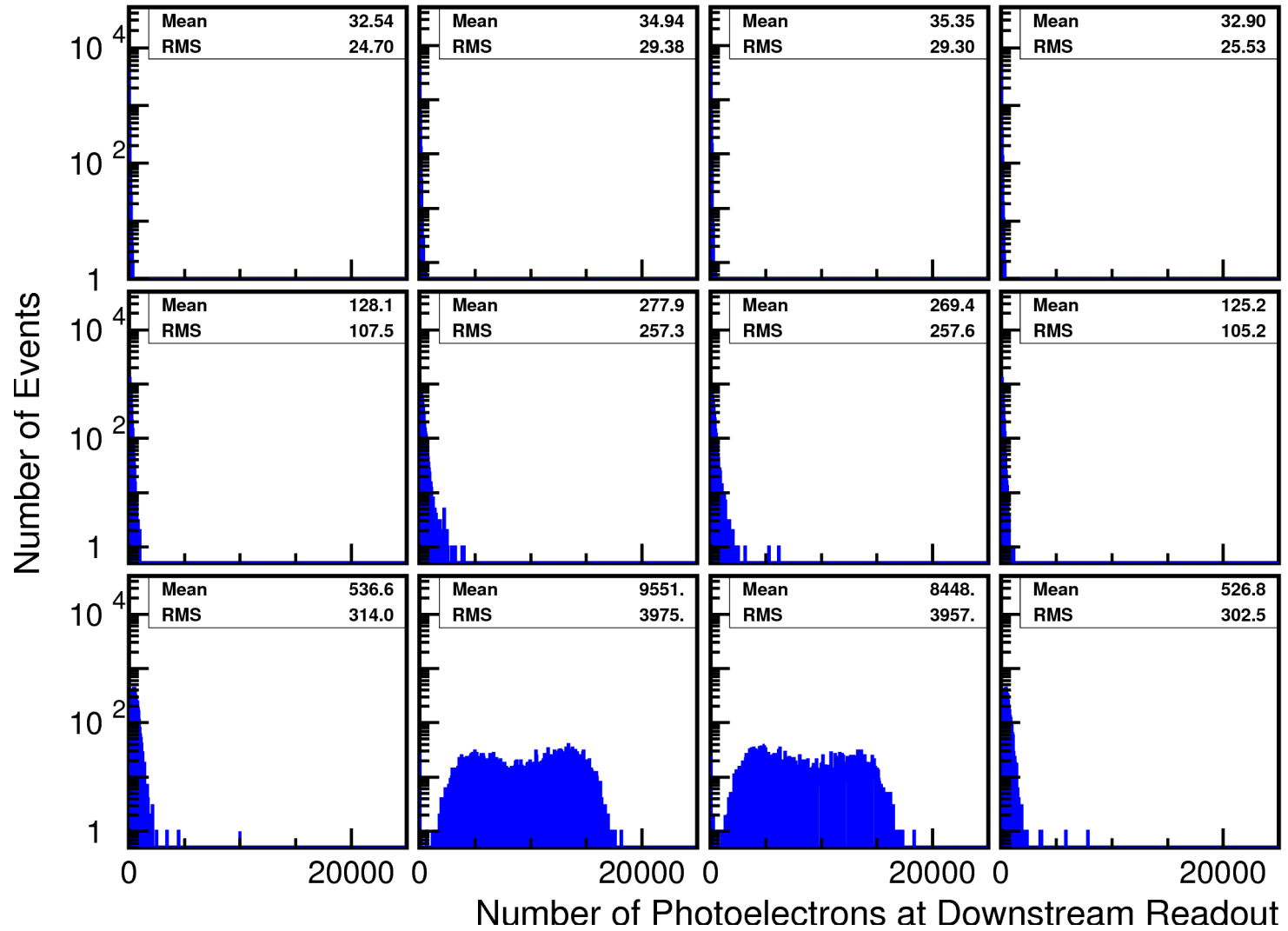
BCal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 12$  deg.; gap



Bcal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 12$  deg.; gap

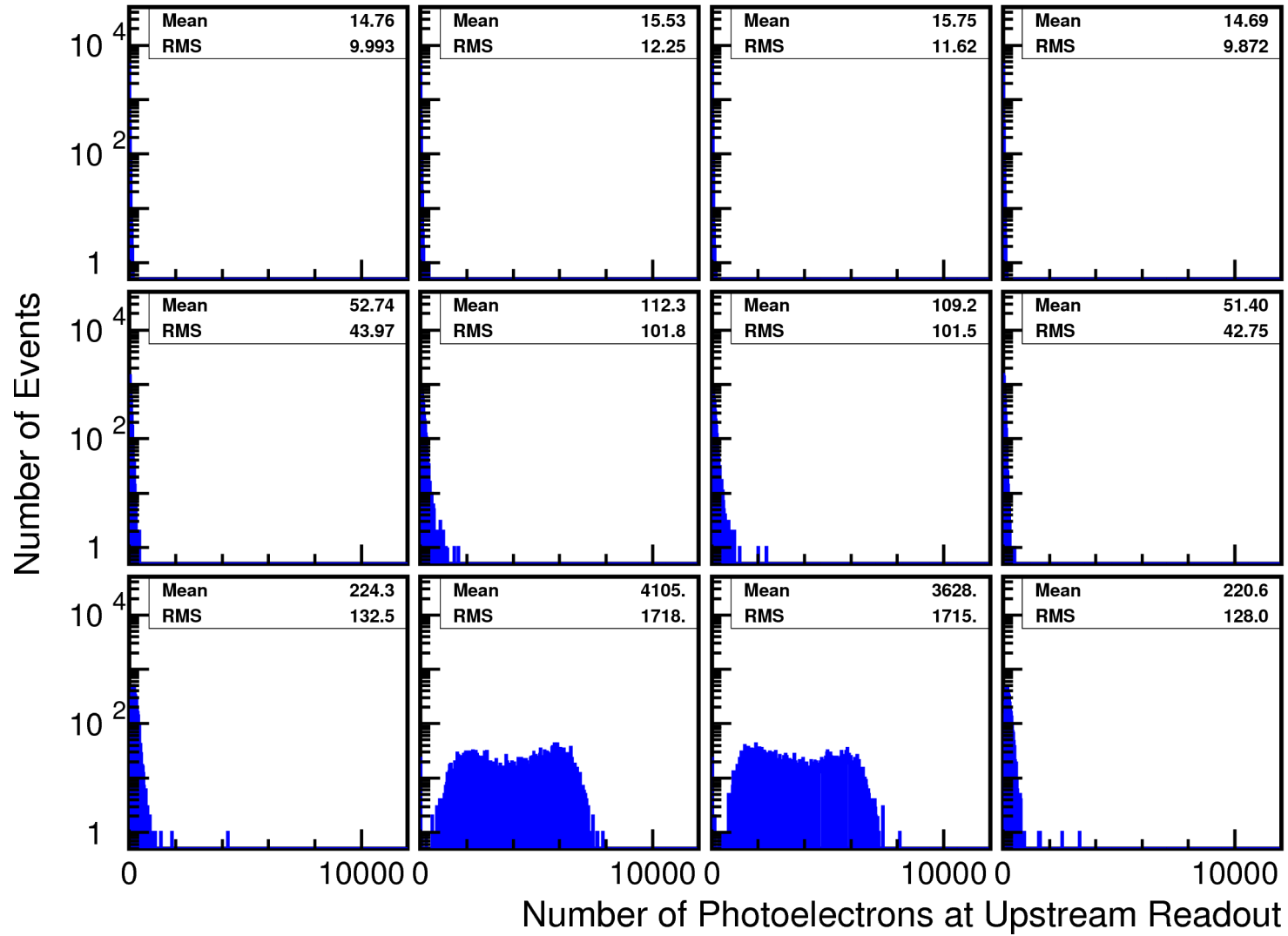


B-Cal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 12$  deg.; gap



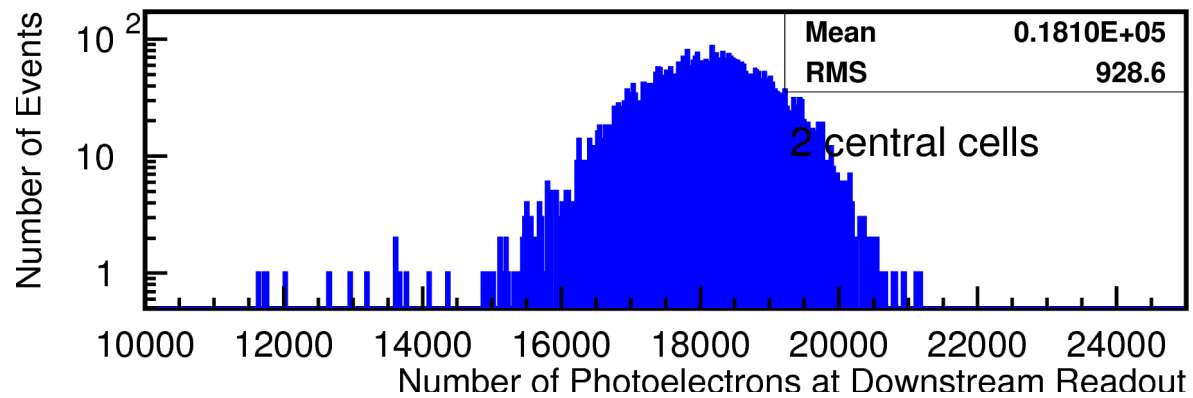
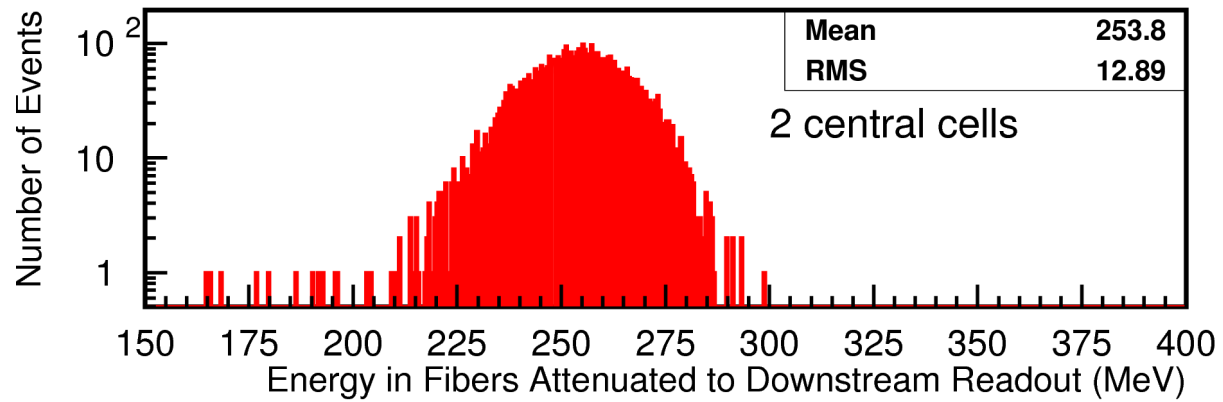
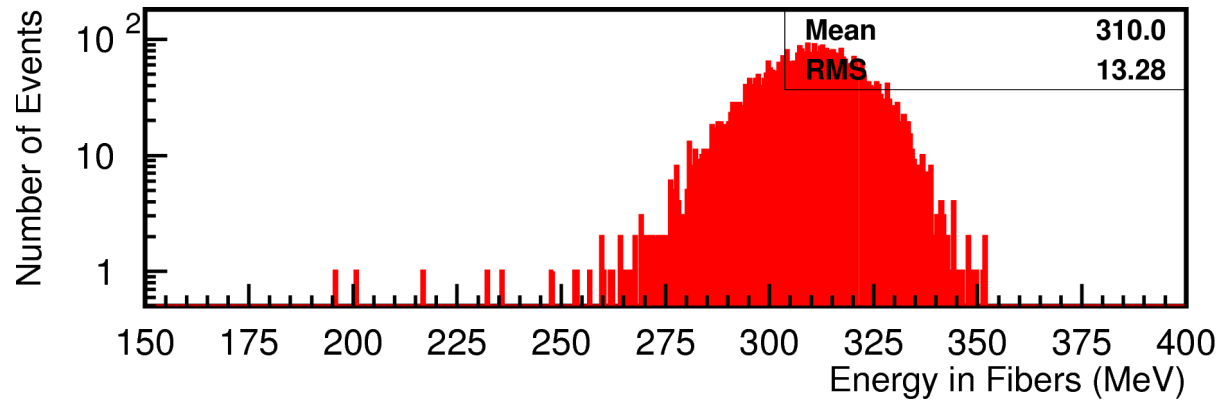
**MeV-to-Npe conversion according to Shipment 3**

BCal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 12$  deg.; gap

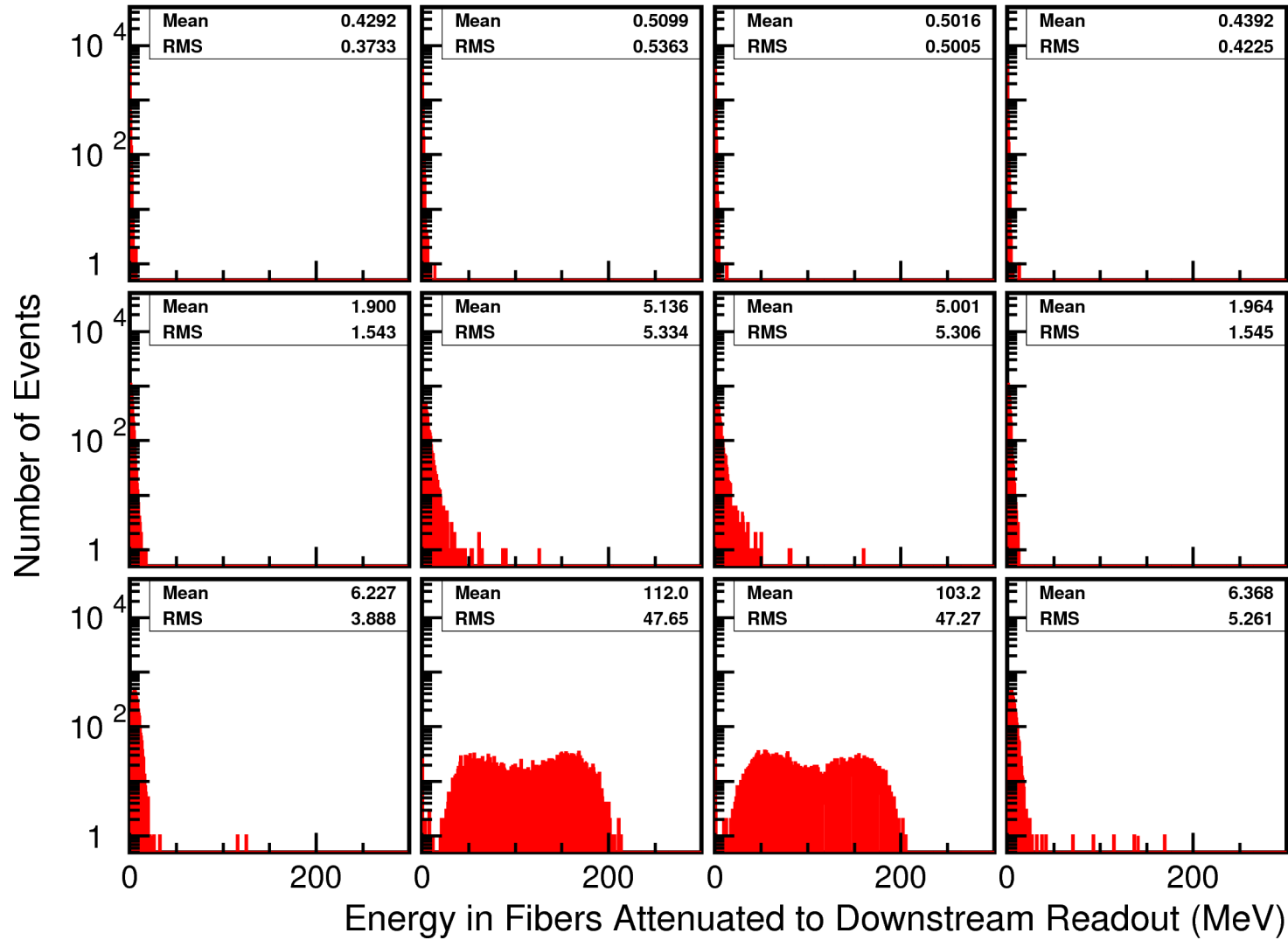




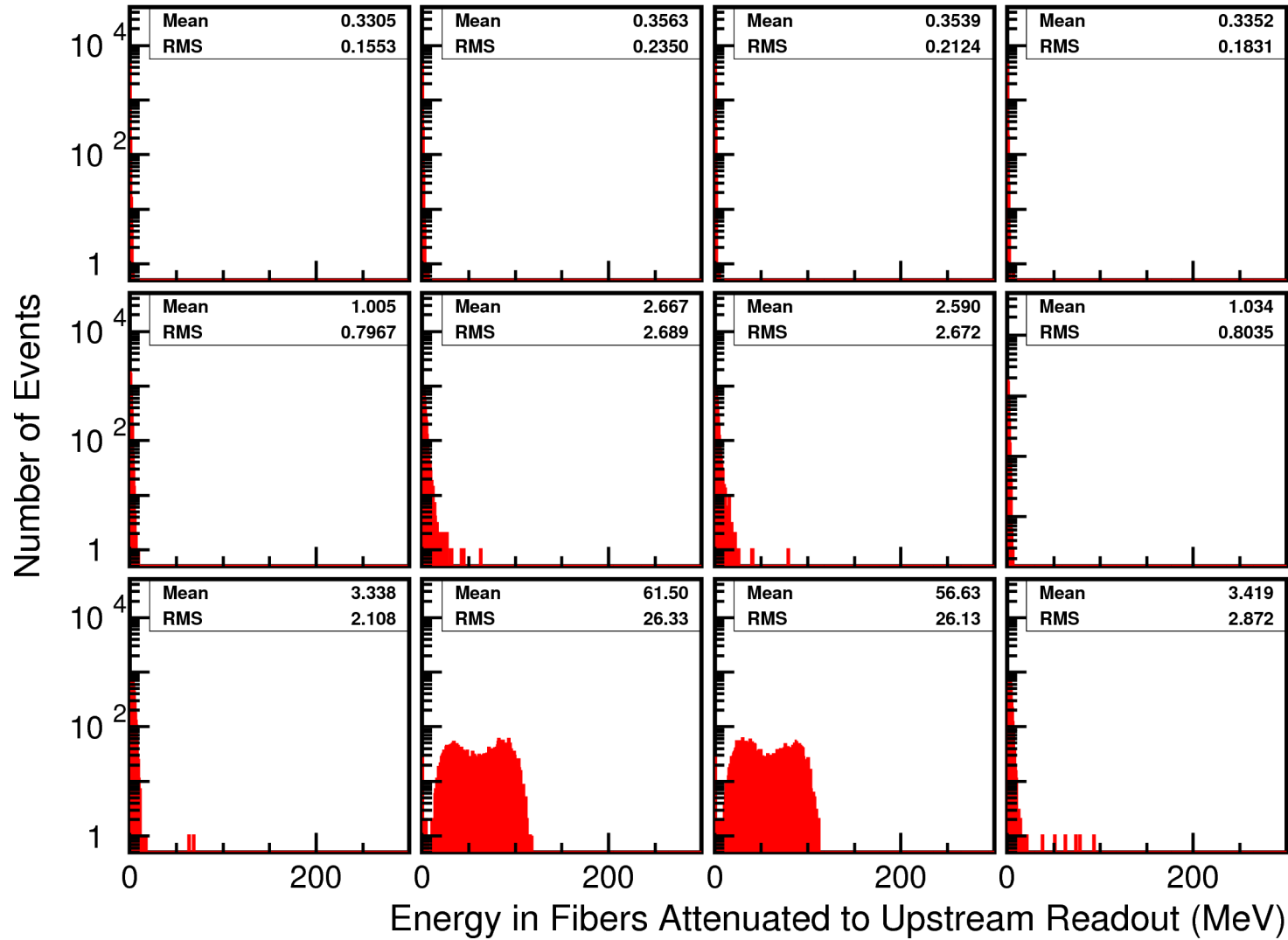
Bcal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 12$  deg.; gap



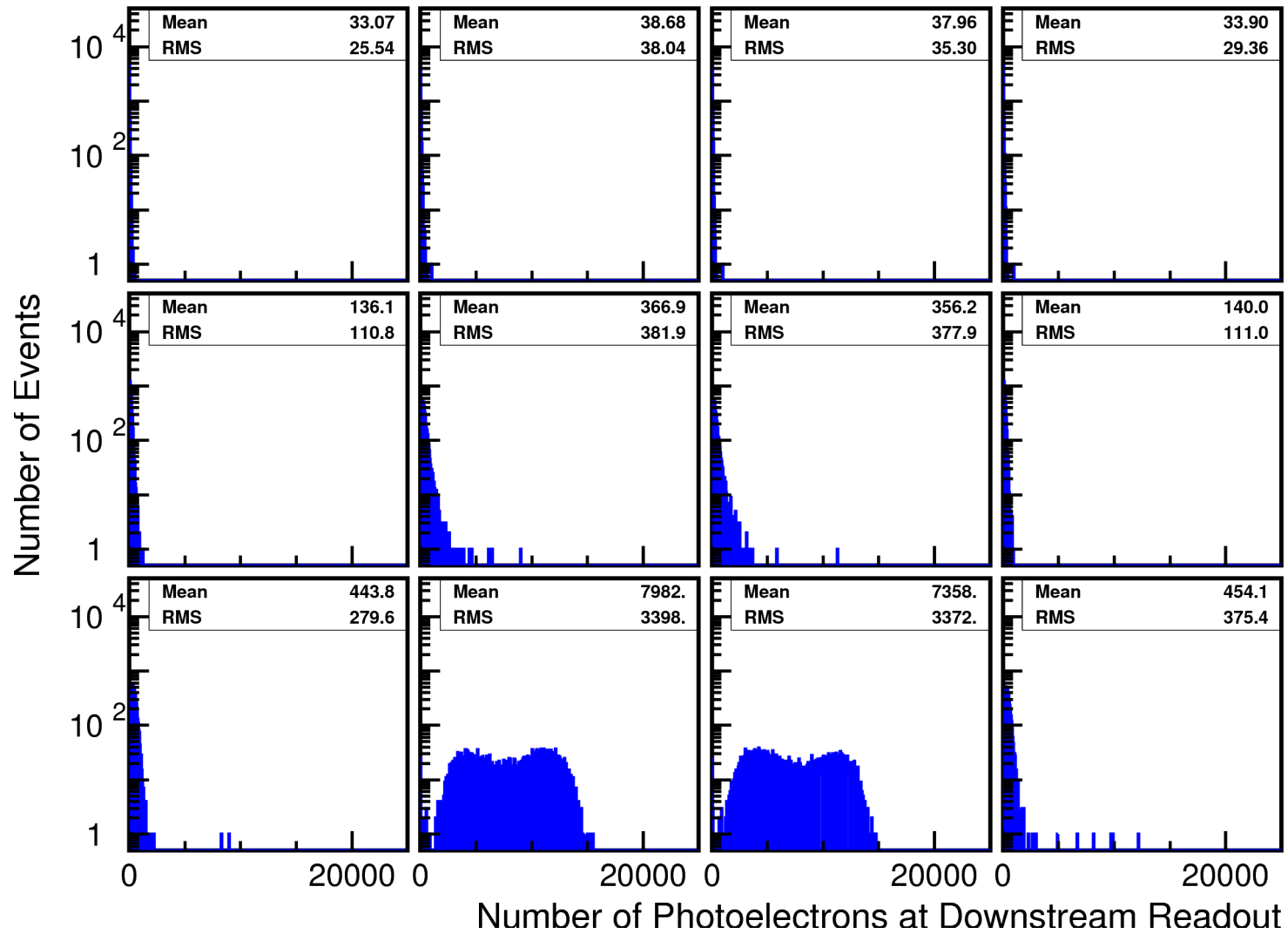
Bcal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 14$  deg.; gap



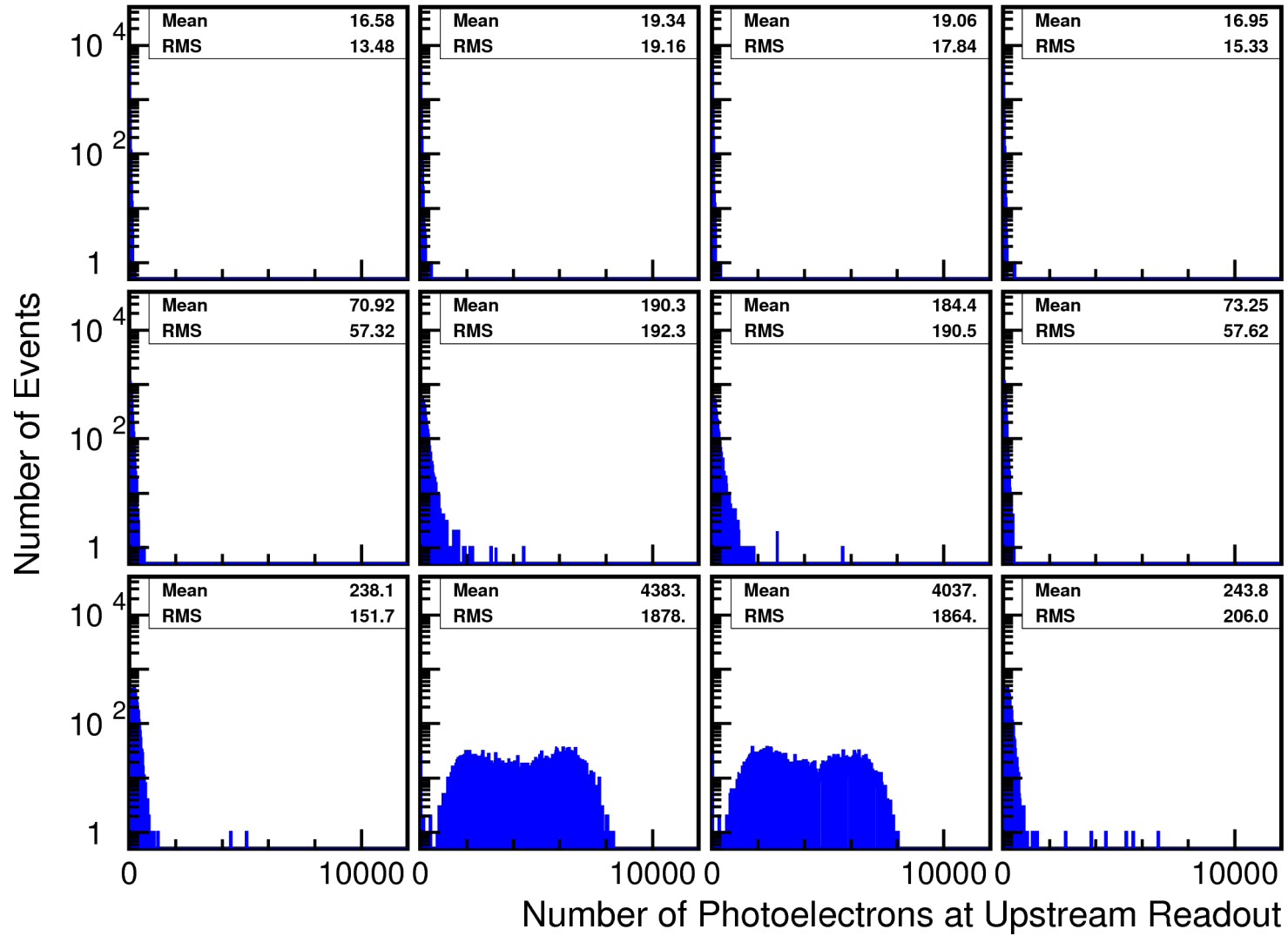
BCal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 14$  deg.; gap



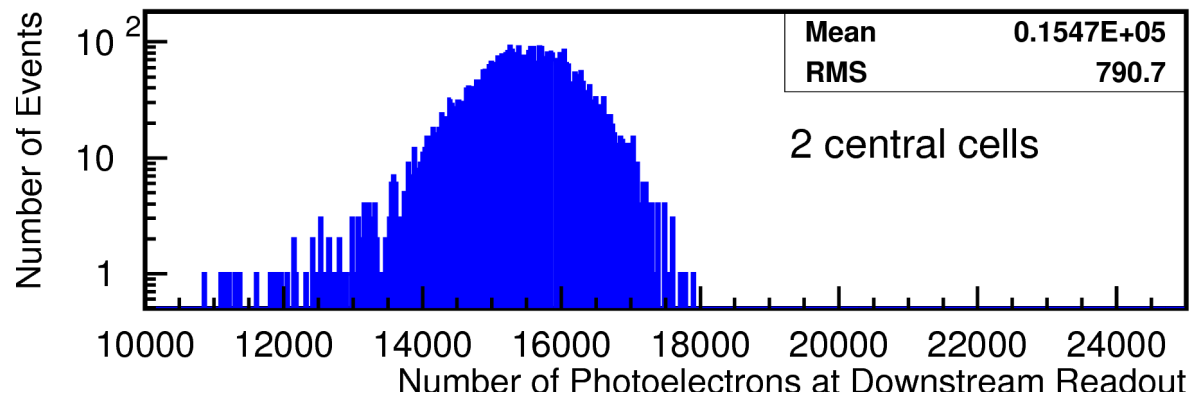
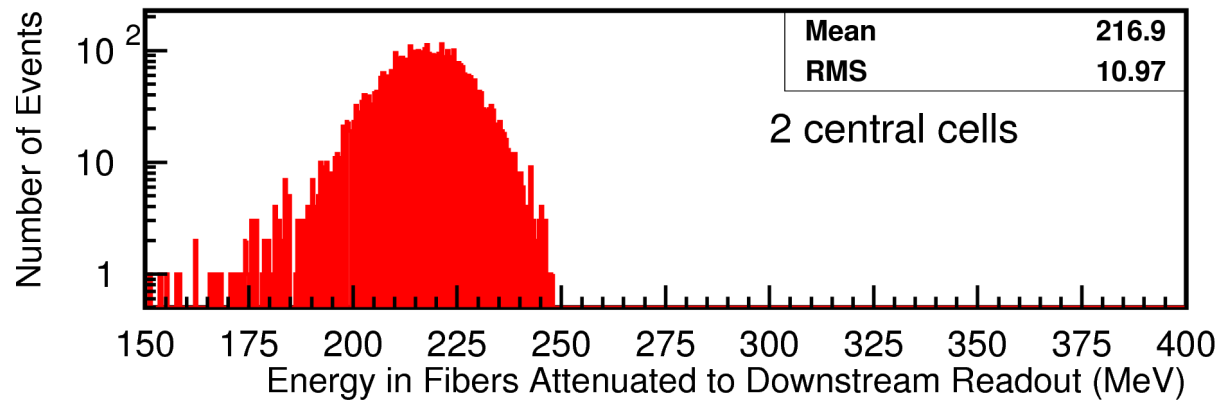
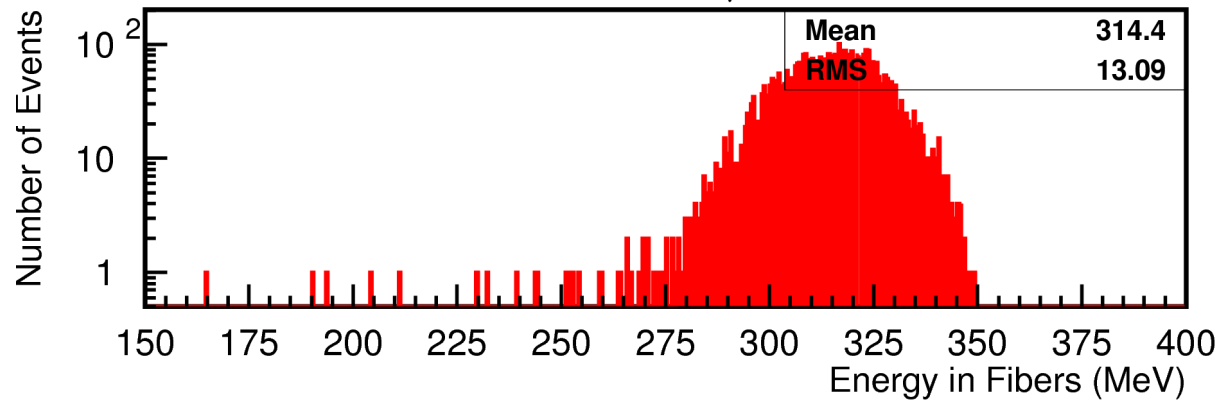
Bcal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 14$  deg.; gap



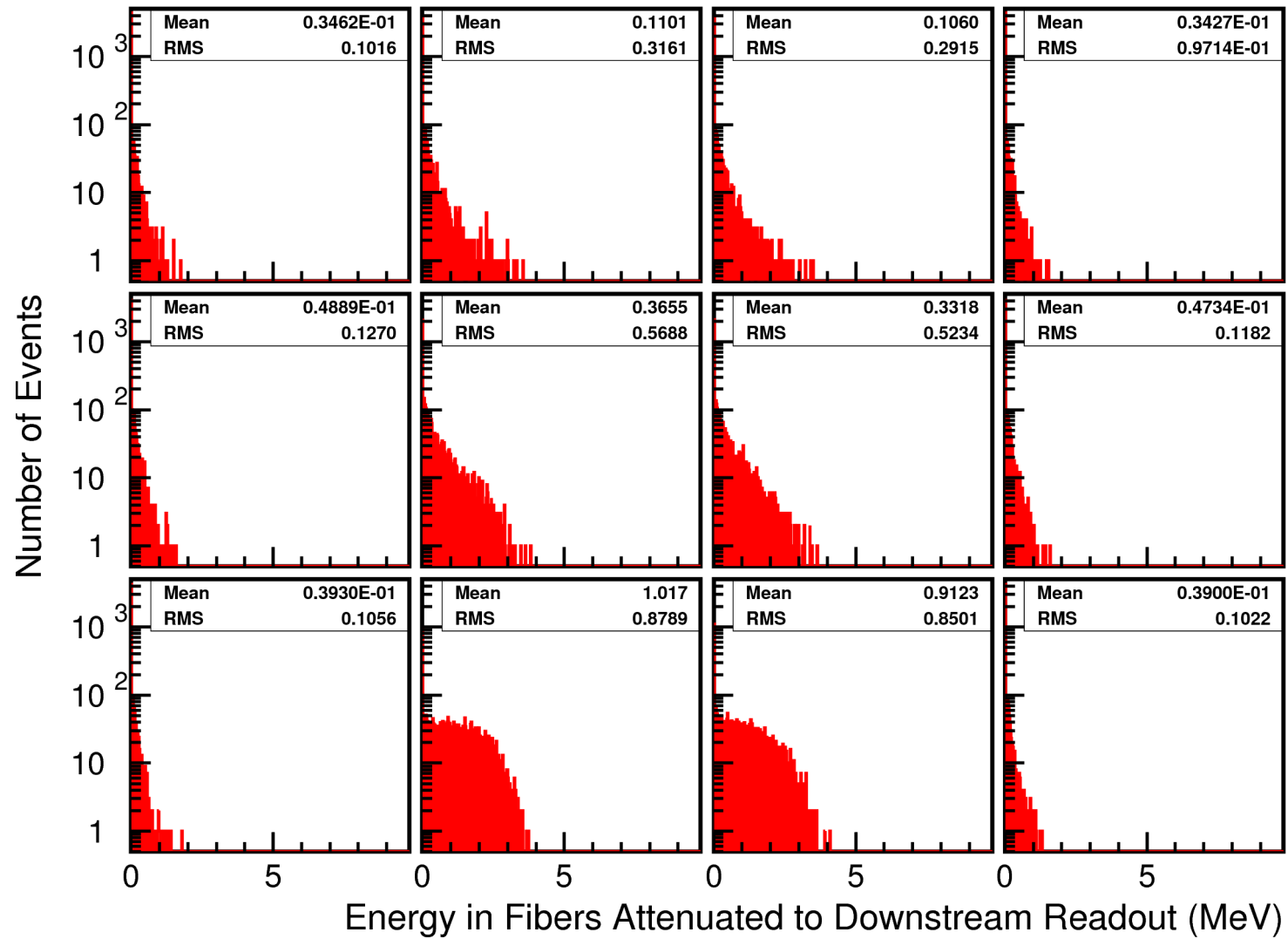
Bcal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 14$  deg.; gap



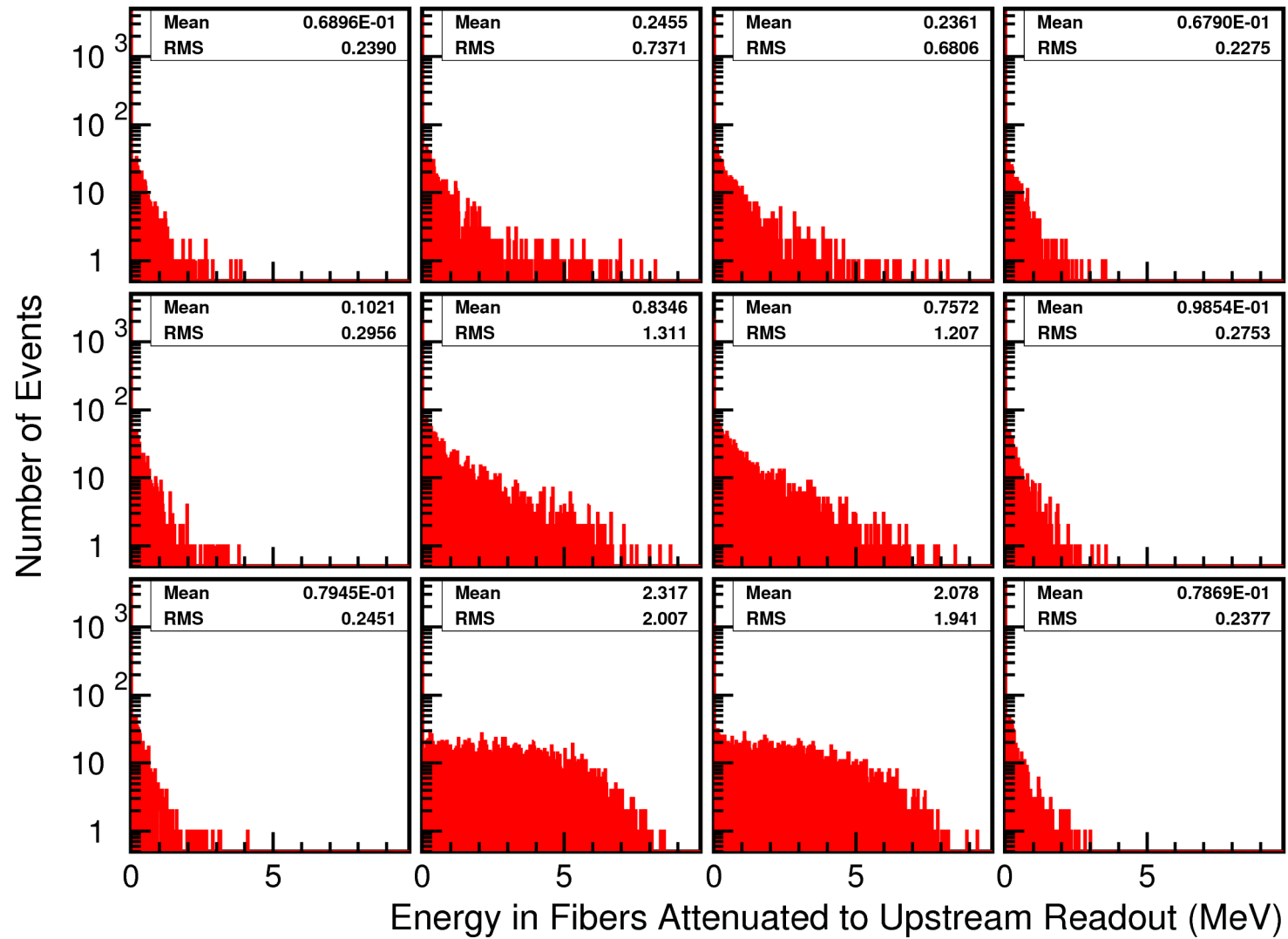
Bcal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 2500$  MeV;  $\Theta = 14$  deg.; gap



BCal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 60$  MeV;  $\Theta = 105$  deg.; gap

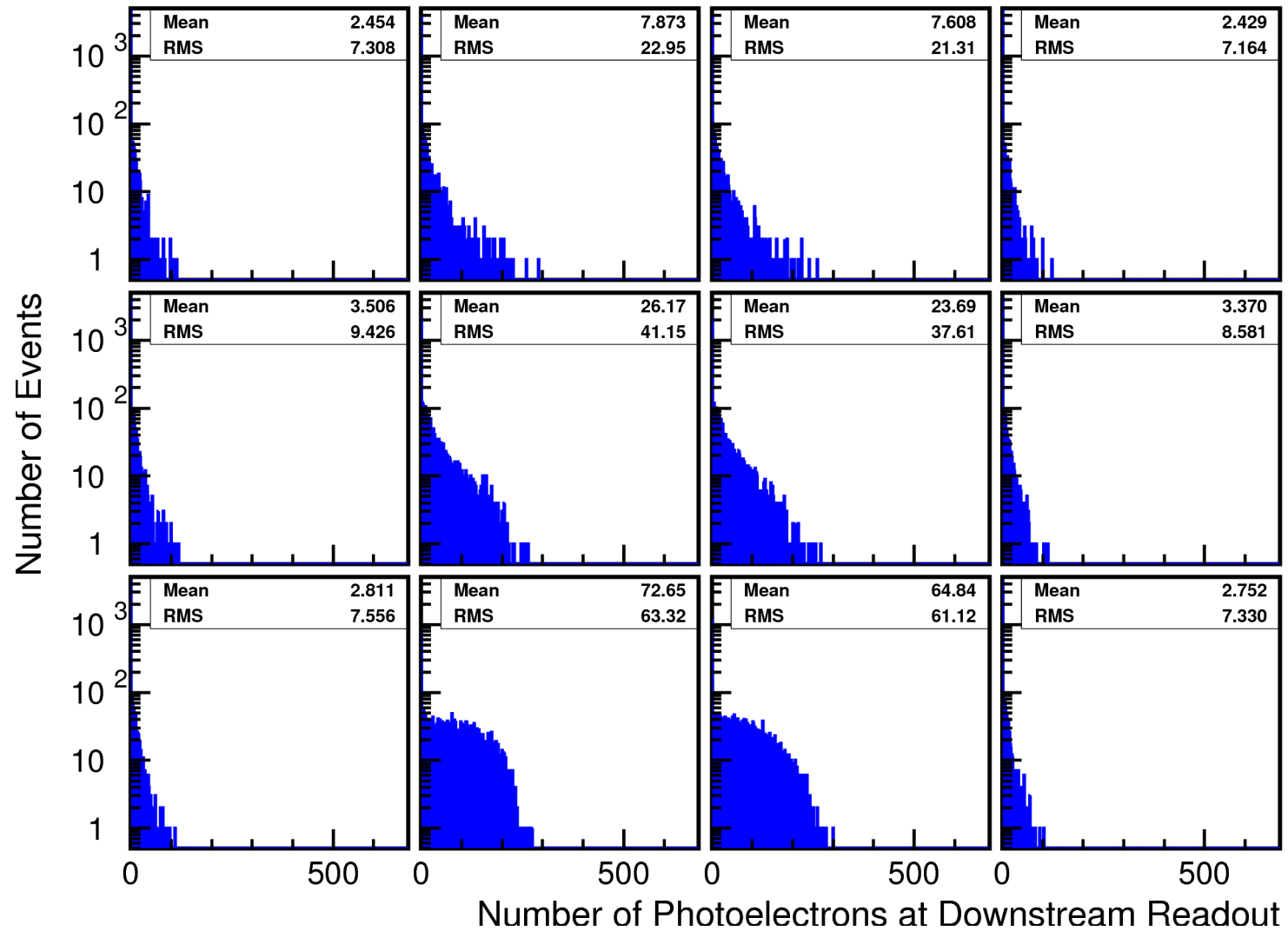


BCal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 60$  MeV;  $\Theta = 105$  deg.; gap





BCal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 60$  MeV;  $\Theta = 105$  deg.; gap



BCal Simulation (FLUKA 2008.3b.2);  $E_\gamma = 60$  MeV;  $\Theta = 105$  deg.; gap

