

Status Report

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Apr. 10 , 2020
mPMT meeting

I was misunderstanding the meaning of the setting.

- gps/direction
- theta , phi
- gps/ang/type iso

→ I did comment out and rebuilt the laser simulation.

```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 0 0 -1
197 /gps/position 0 0 0 m
198 /gps/number 1000
199 /gps/ang/type iso
200 /gps/ang/mintheta 0 deg
201 /gps/ang/maxtheta 180 deg
202 /gps/ang/minphi 0 deg
203 /gps/ang/maxphi 360 deg
204 /gps/verbose 0
```



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204 /gps/verbose 0
```

Generated optical photon , 1000 events

```
545 id_reflector_height = 6.53*CLHEP::mm; // for a radius of 7.25mm, for hex: 5.4mm (radius of 6mm)
546 id_reflector_z_offset = 4.8*CLHEP::mm; //from KM3Net CAD drawings
547 id_reflector_angle = 48.*CLHEP::deg; // Need to be remeasured for different PMT curvature
```

With a reflector
Generated along the x axis

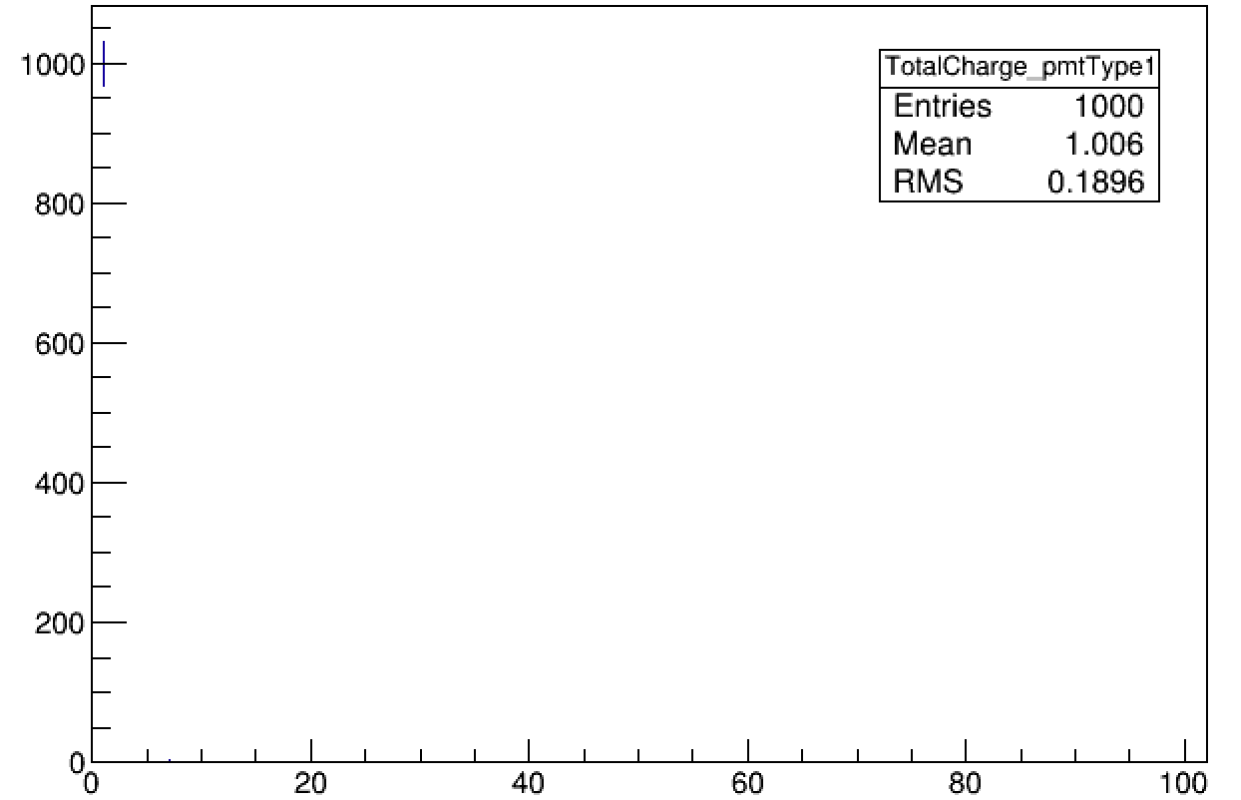
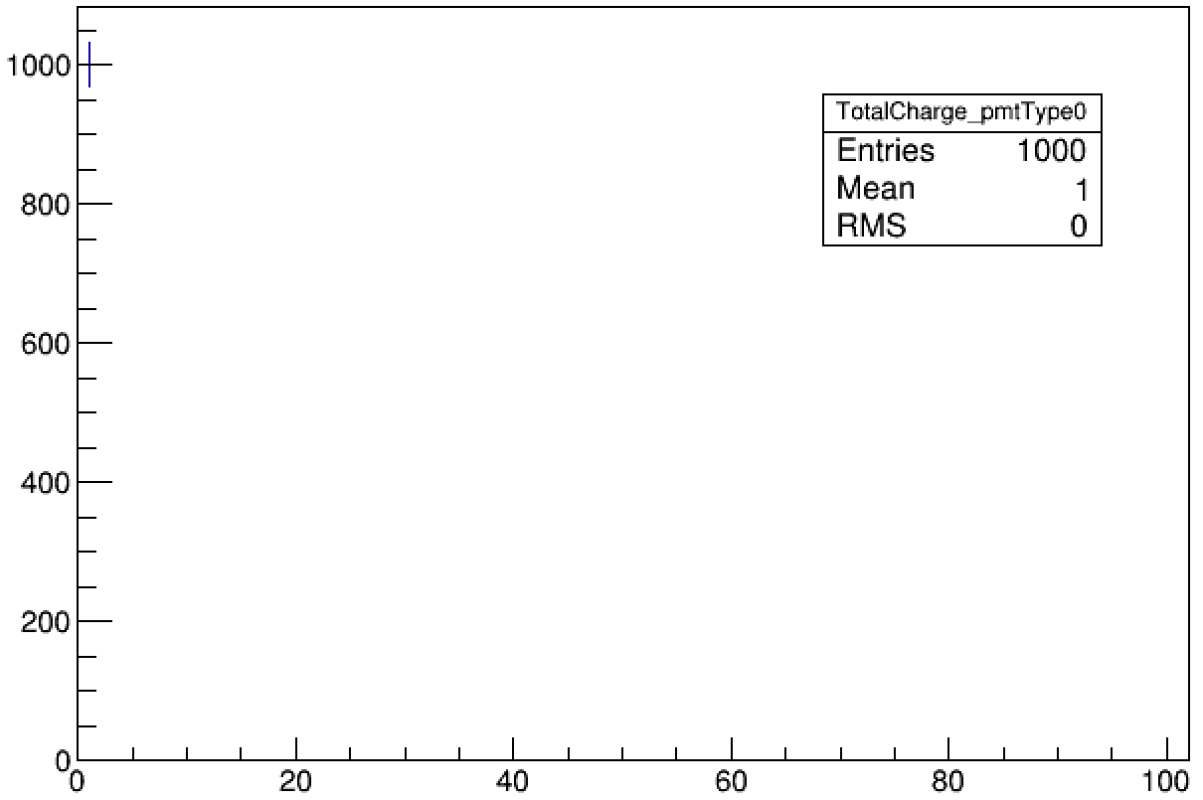
Took only triggered events : Mode 0
triggerNdigits/Threshold 0
Setdarkwindow 0

```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 1 0 0
197 /gps/position 0 0 0 m
198 /gps/number 1000
199 # /gps/ang/type iso
200 # /gps/ang/mintheta 0 deg
201 # /gps/ang/maxtheta 180 deg
202 # /gps/ang/minphi 0 deg
203 # /gps/ang/maxphi 360 deg
204 /gps/verbose 0
```

Total Charge

B&L

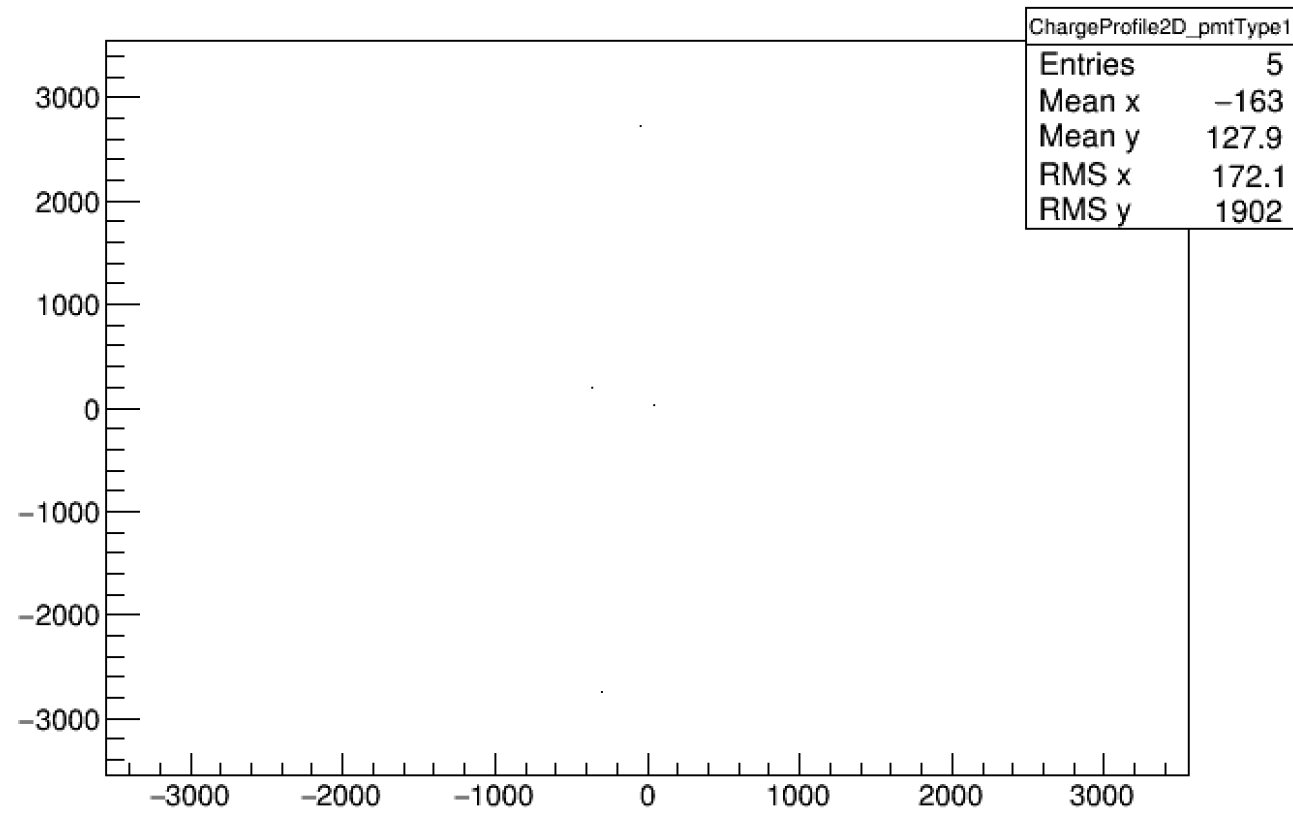
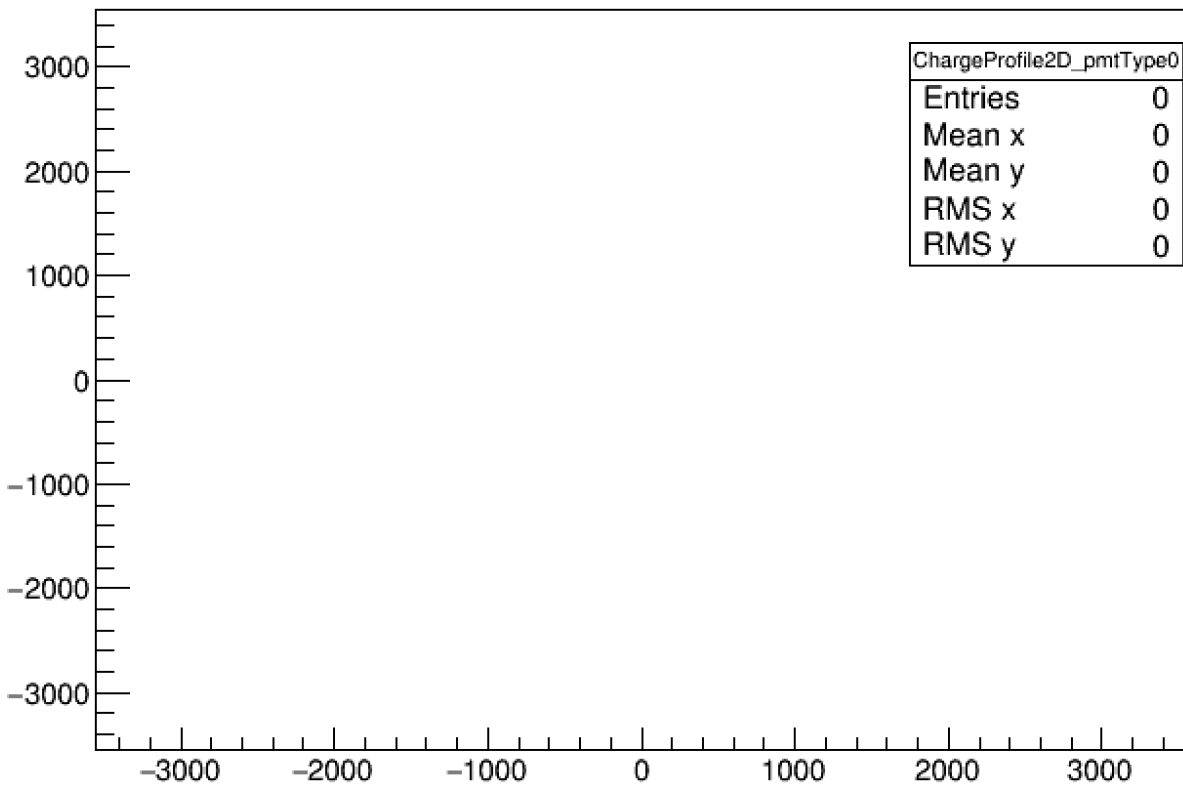
mPMT



Charge Profile2D

B&L

mPMT



I want to build single 3-inch PMT and mPMT on simulation
→ checking how to bring out the only one PMT from hyperK geometry
by specifying the ID of each PMT

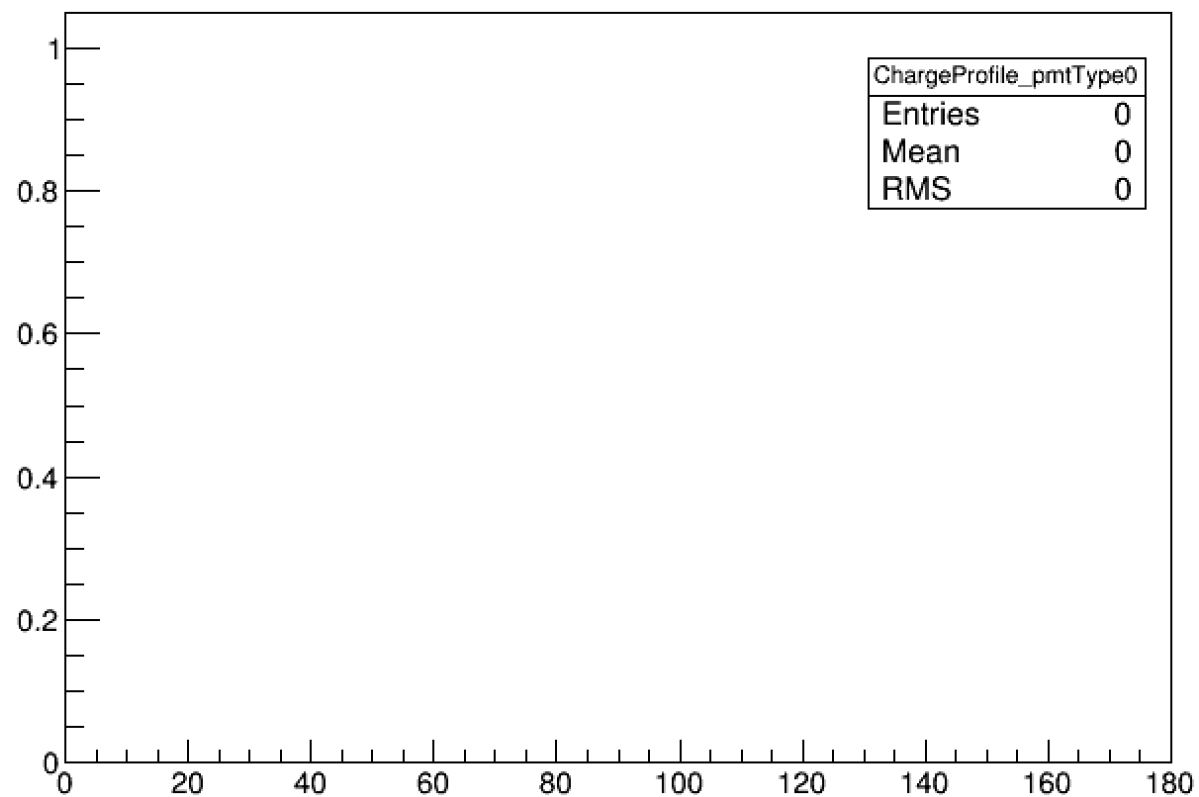


By using this method, I plan to evaluate the angular dependence.

backup

Charge Profile

B&L



mPMT

