```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 1 1 1
197 /gps/position 0 0 15 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
```

(1 1 1)

15m

with a reflector
plotDigitized True
Took only triggered events (Mode 0)
Setdarkwindow 0

## Total Charge

| TotalCharge_pmtType0 | |
| --- | --- |
| Entries | 1000 |
| Mean | 1 |
| RMS | 0 |

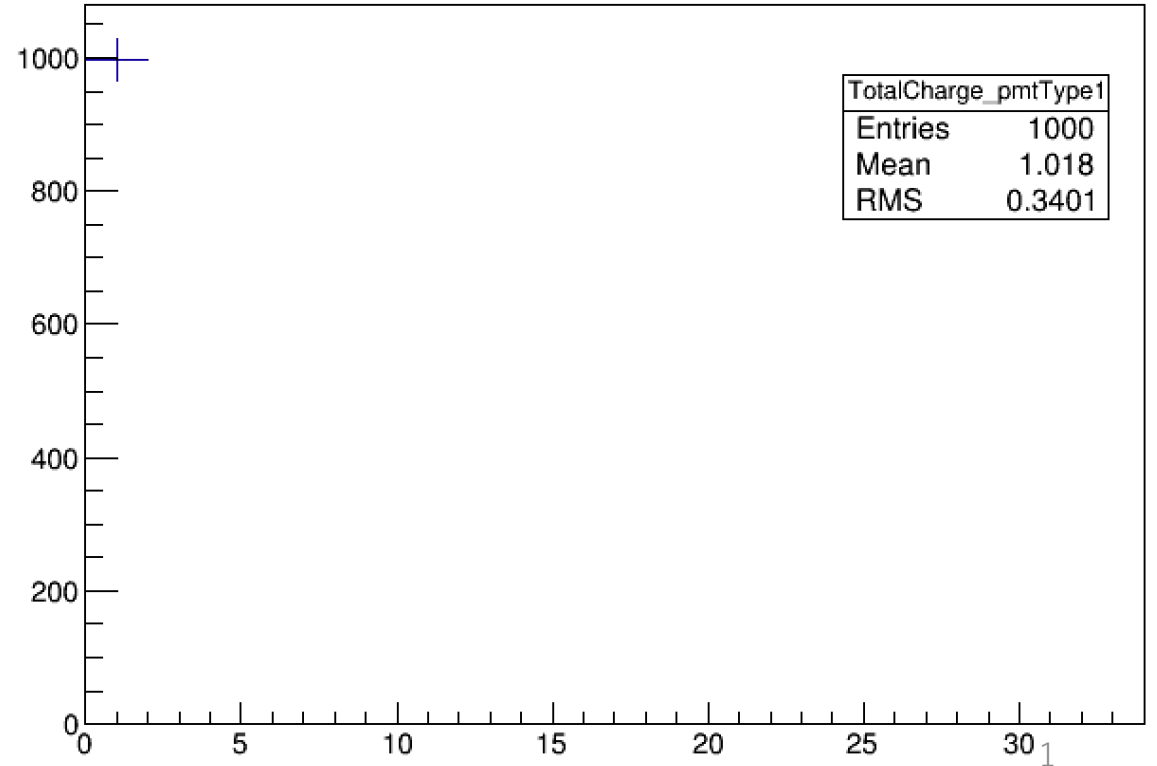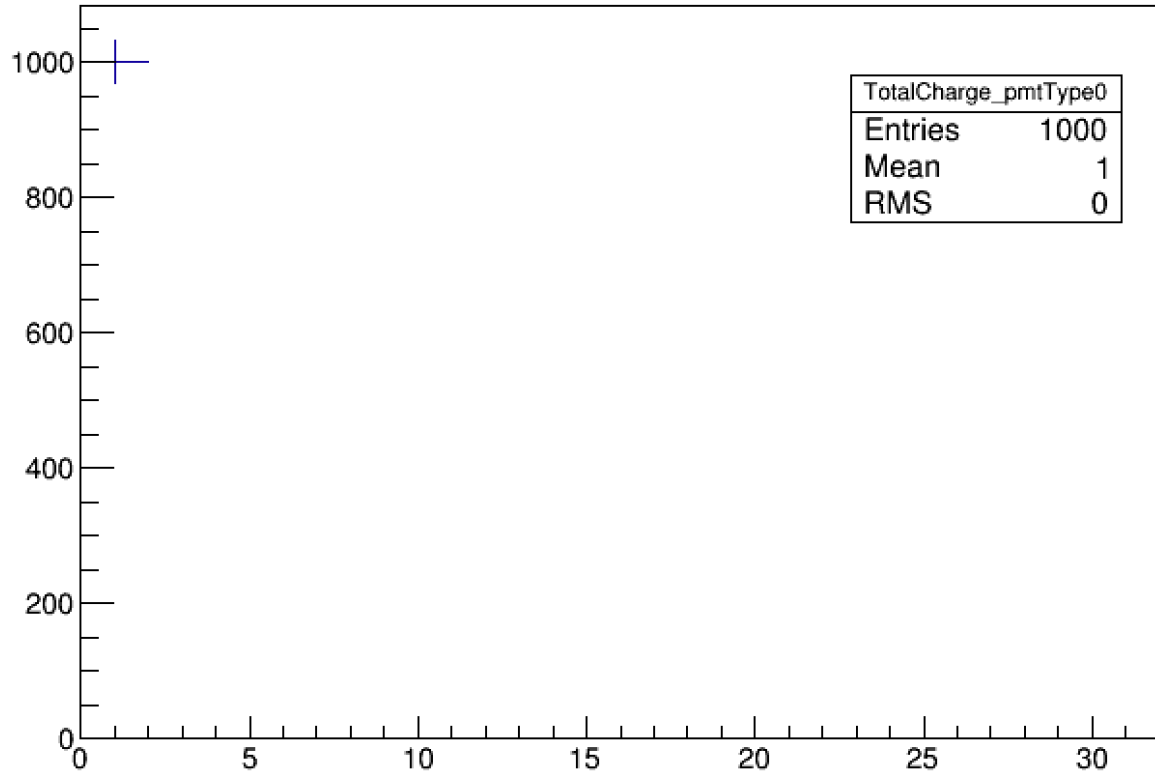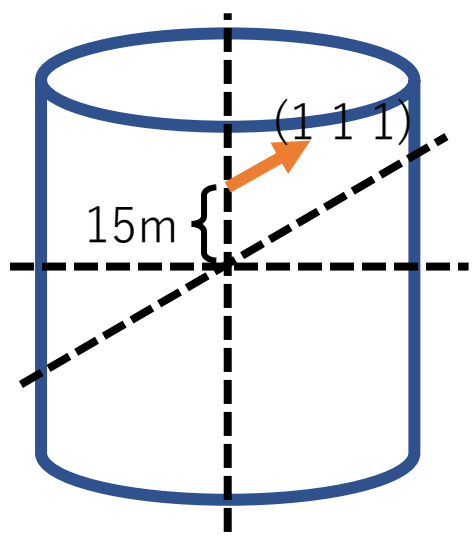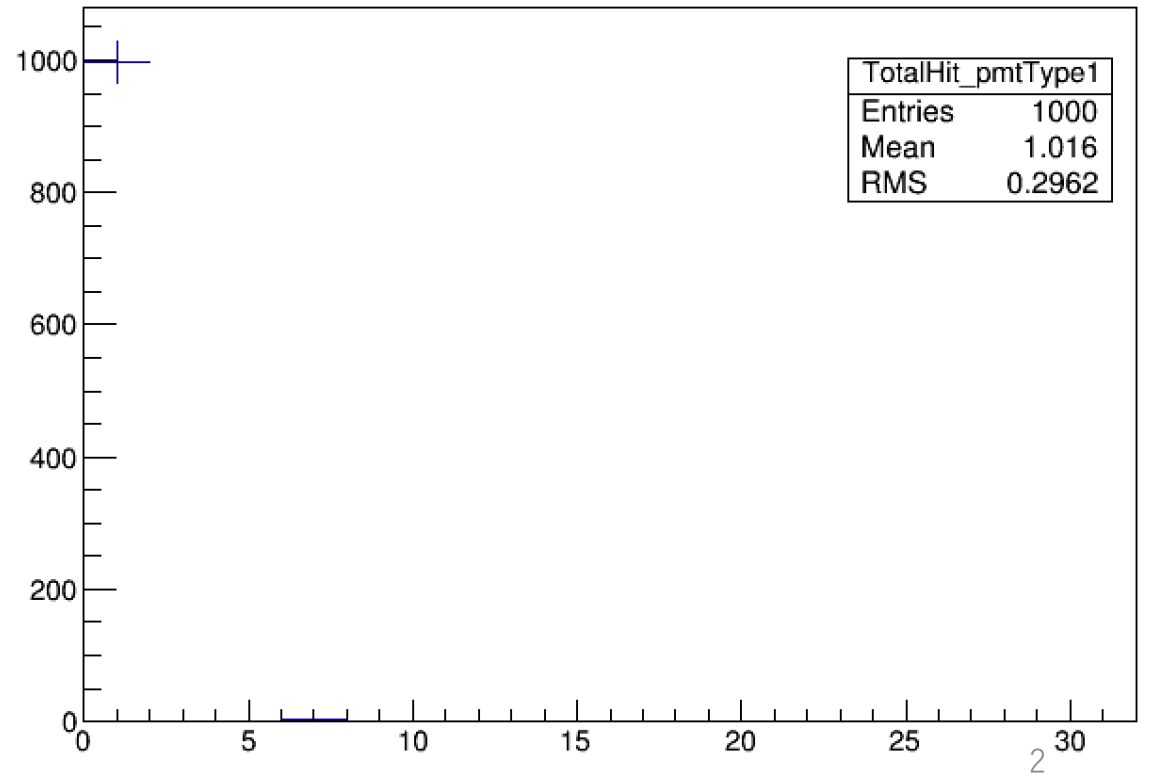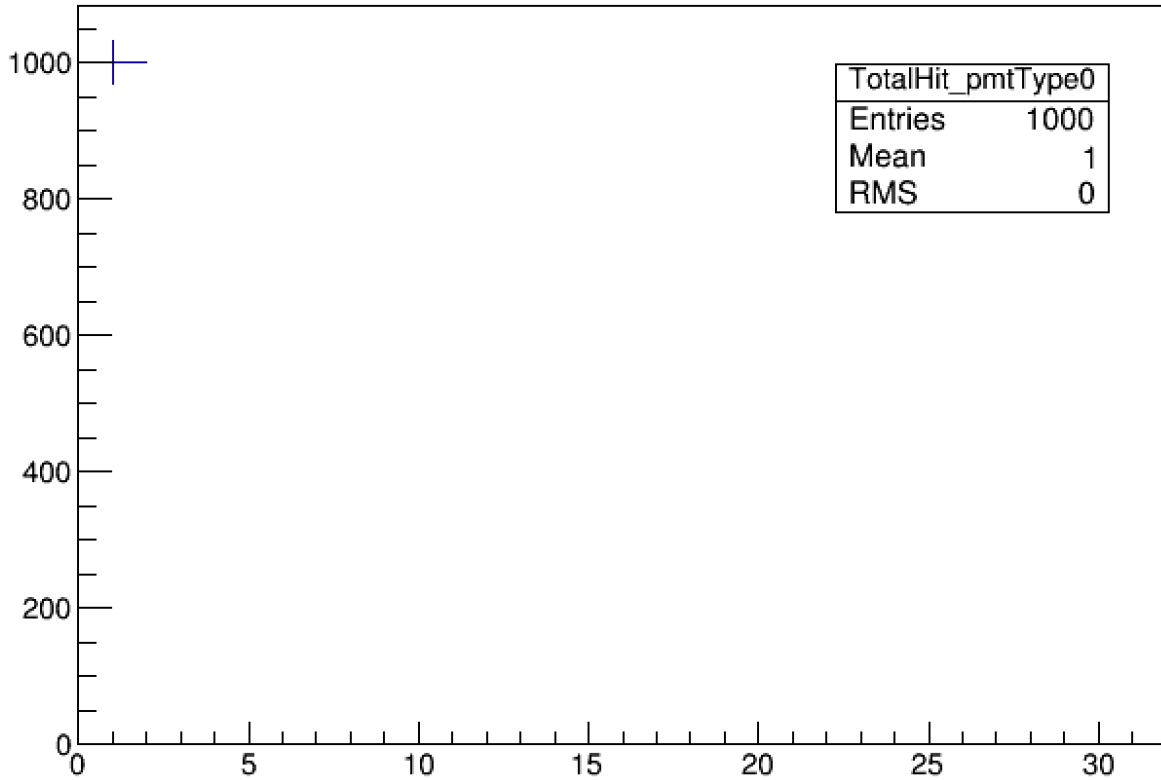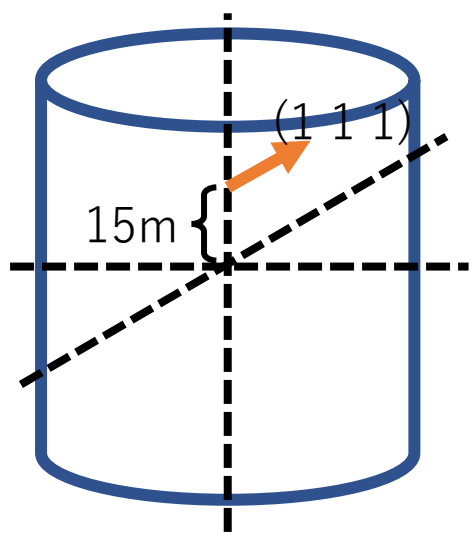| TotalCharge_pmtType1 | |
| --- | --- |
| Entries | 1000 |
| Mean | 1.018 |
| RMS | 0.3401 |

(1 1 1)

15m

with a reflector
plotDigitized True
Took only triggered events (Mode 0)
Setdarkwindow 0

```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 1 1 1
197 /gps/position 0 0 15 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 Hit

| TotalHit_pmtType0 | |
|---|---|
| Entries | 1000 |
| Mean | 1 |
| RMS | 0 |

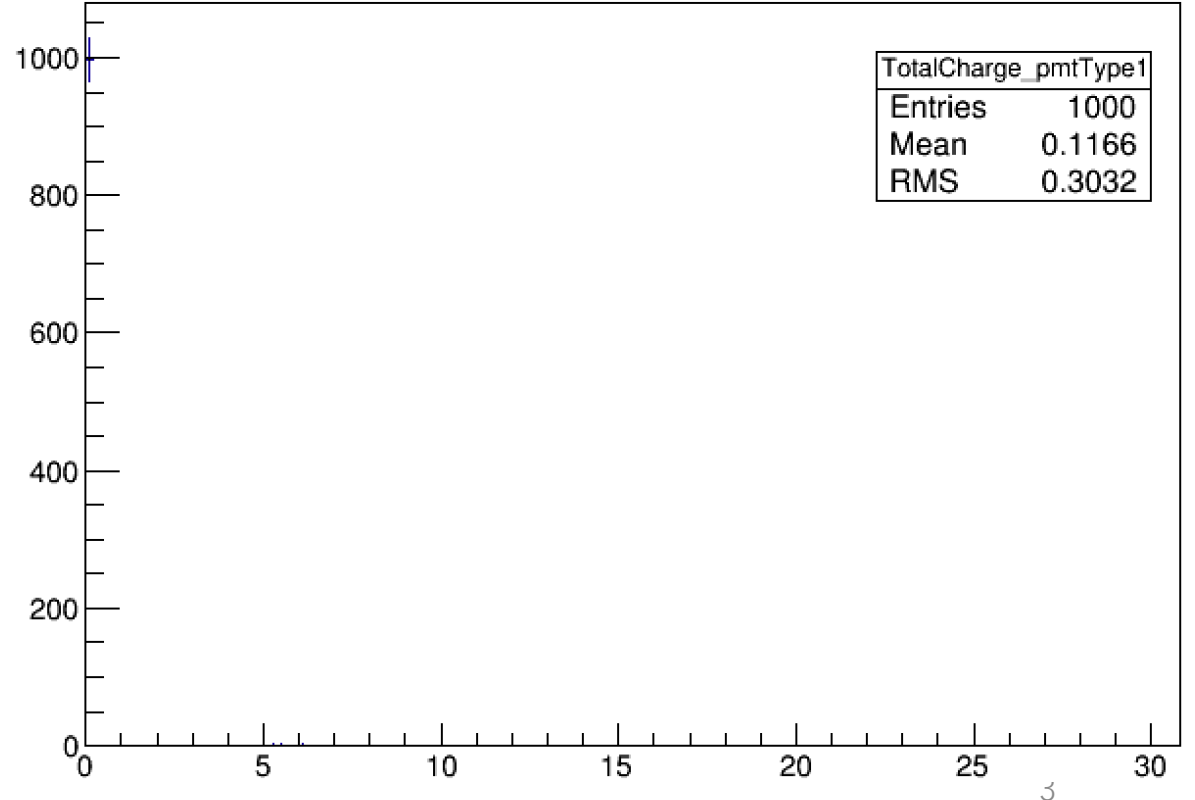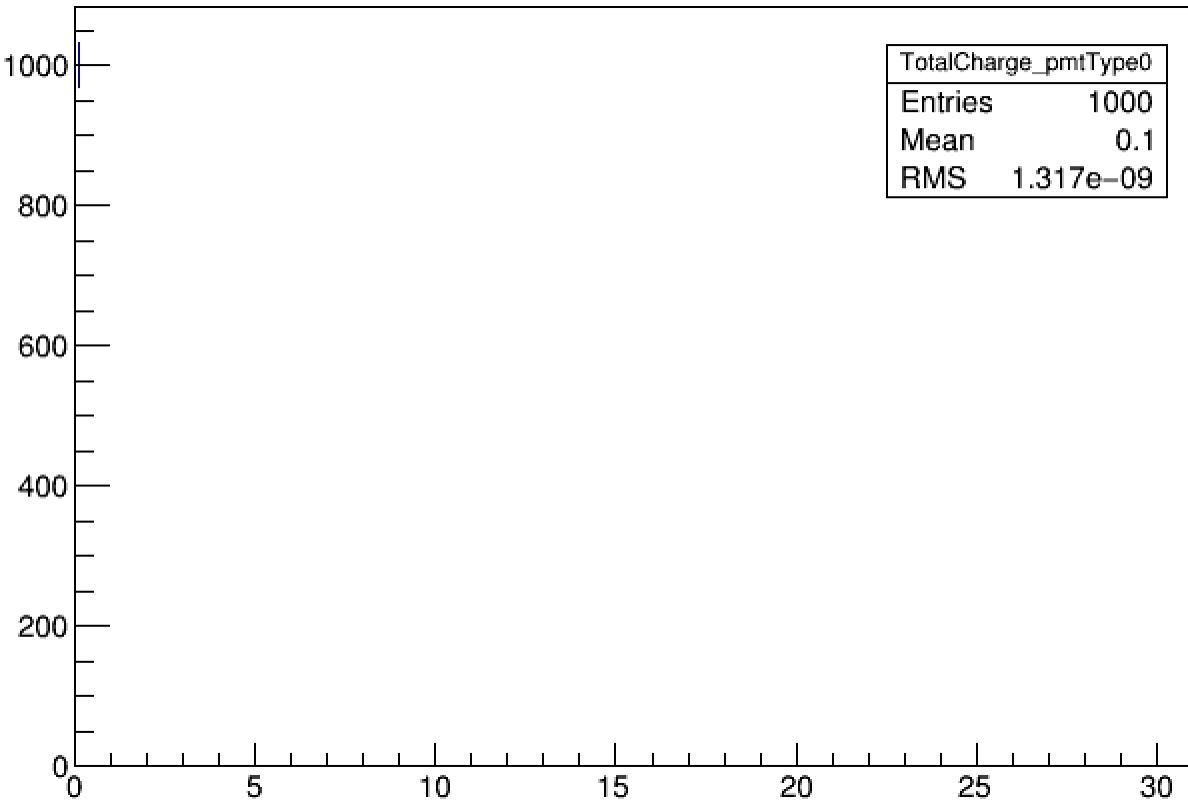| TotalHit_pmtType1 | |
|---|---|
| Entries | 1000 |
| Mean | 1.016 |
| RMS | 0.2962 |

without a reflector
plotDigitized True
Took only triggered events (Mode 0)
Setdarkwindow 0

```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 1 1 1
197 /gps/position 0 0 15 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

| TotalCharge_pmtType0 | |
| --- | --- |
| Entries | 1000 |
| Mean | 0.1 |
| RMS | 1.317e−09 |

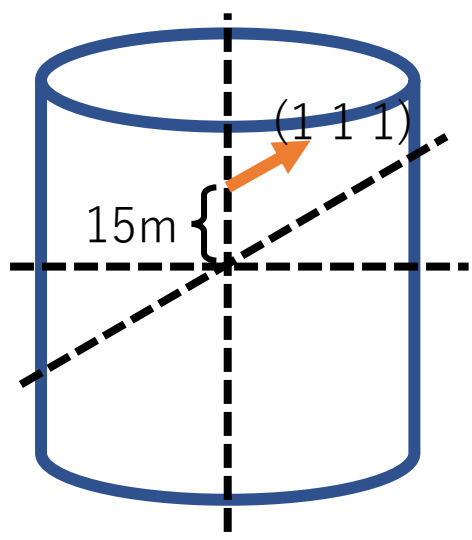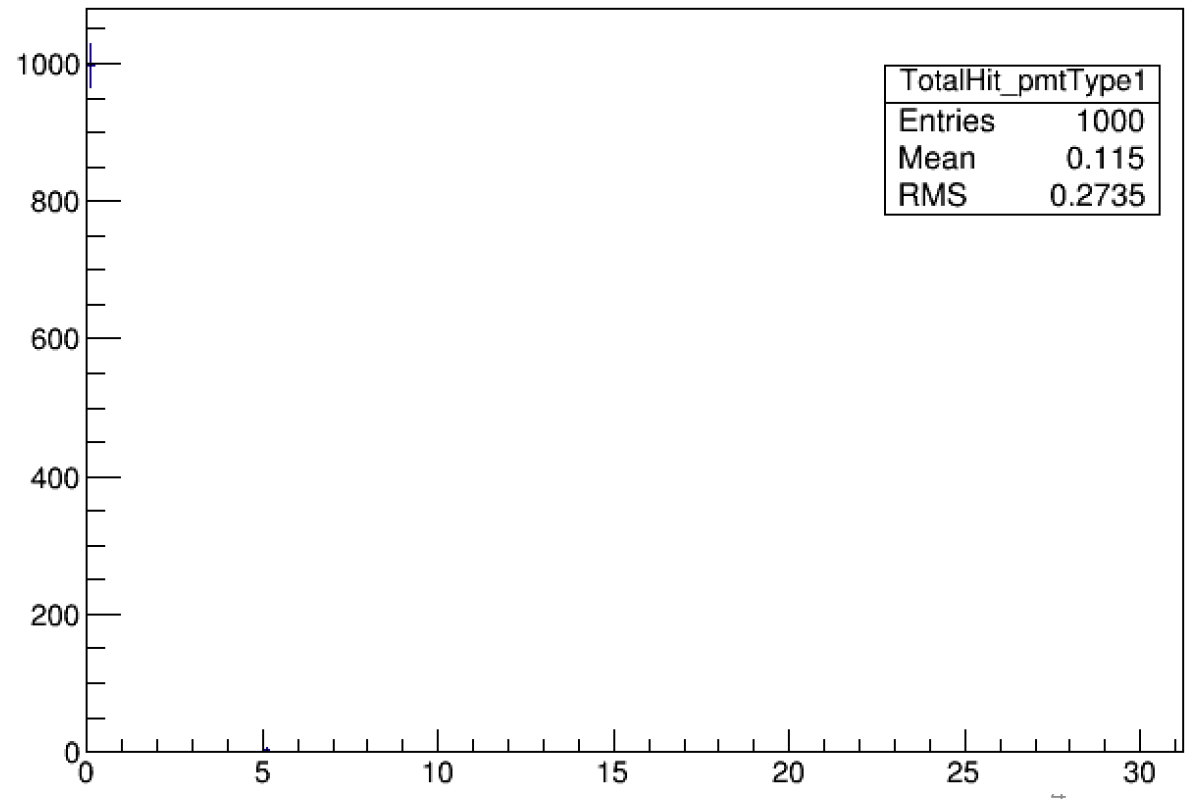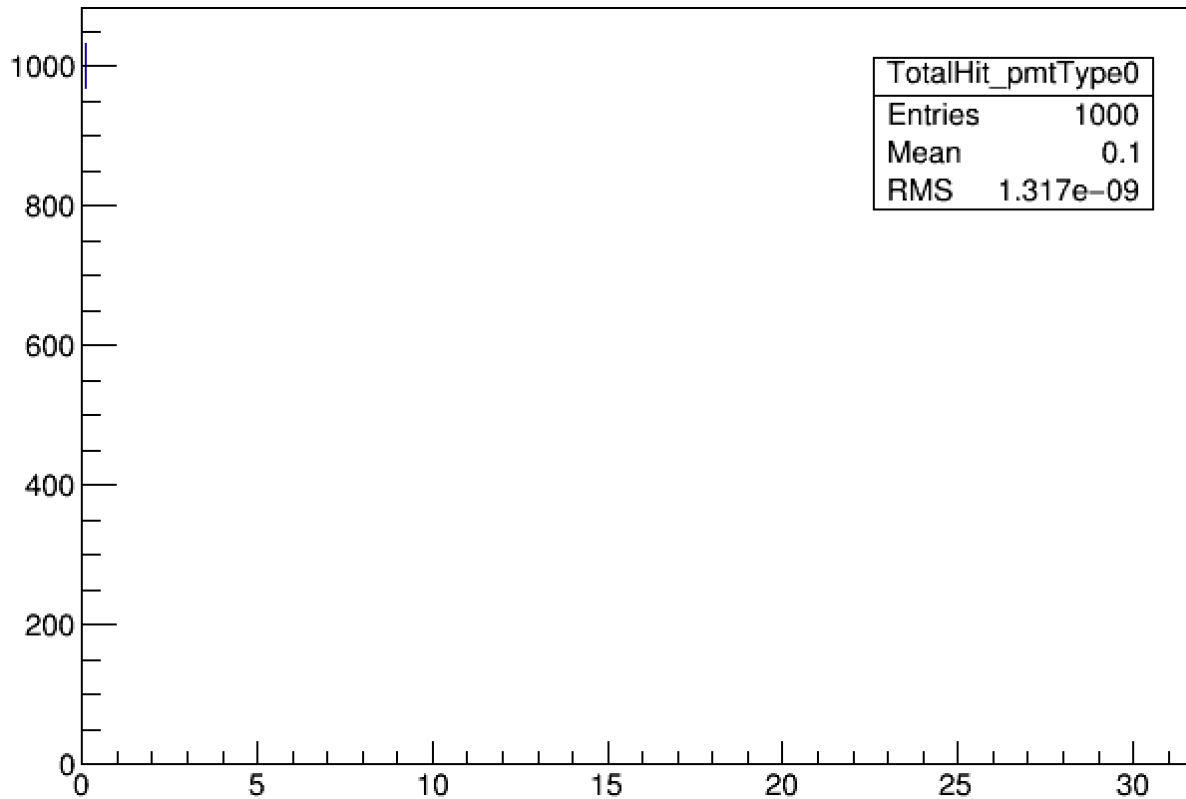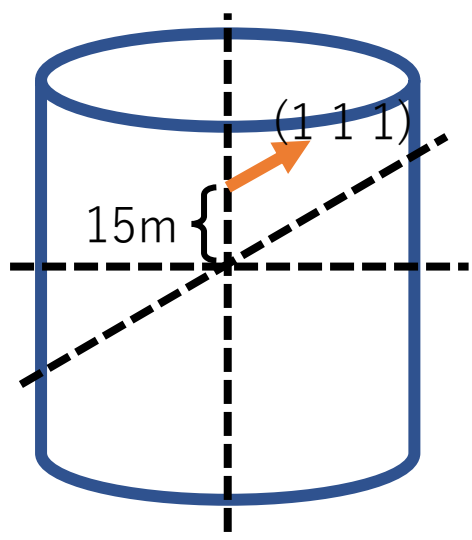| TotalCharge_pmtType1 | |
| --- | --- |
| Entries | 1000 |
| Mean | 0.1166 |
| RMS | 0.3032 |

3

without a reflector
plotDigitized True
Took only triggered events (Mode 0)
Setdarkwindow 0

```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 1 1 1
197 /gps/position 0 0 15 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 Hit



| TotalHit_pmtType0 | |
| --- | --- |
| Entries | 1000 |
| Mean | 0.1 |
| RMS | 1.317e−09 |



| TotalHit_pmtType1 | |
| --- | --- |
| Entries | 1000 |
| Mean | 0.115 |
| RMS | 0.2735 |

```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 1 1 1
197 /gps/position 0 0 15 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
```
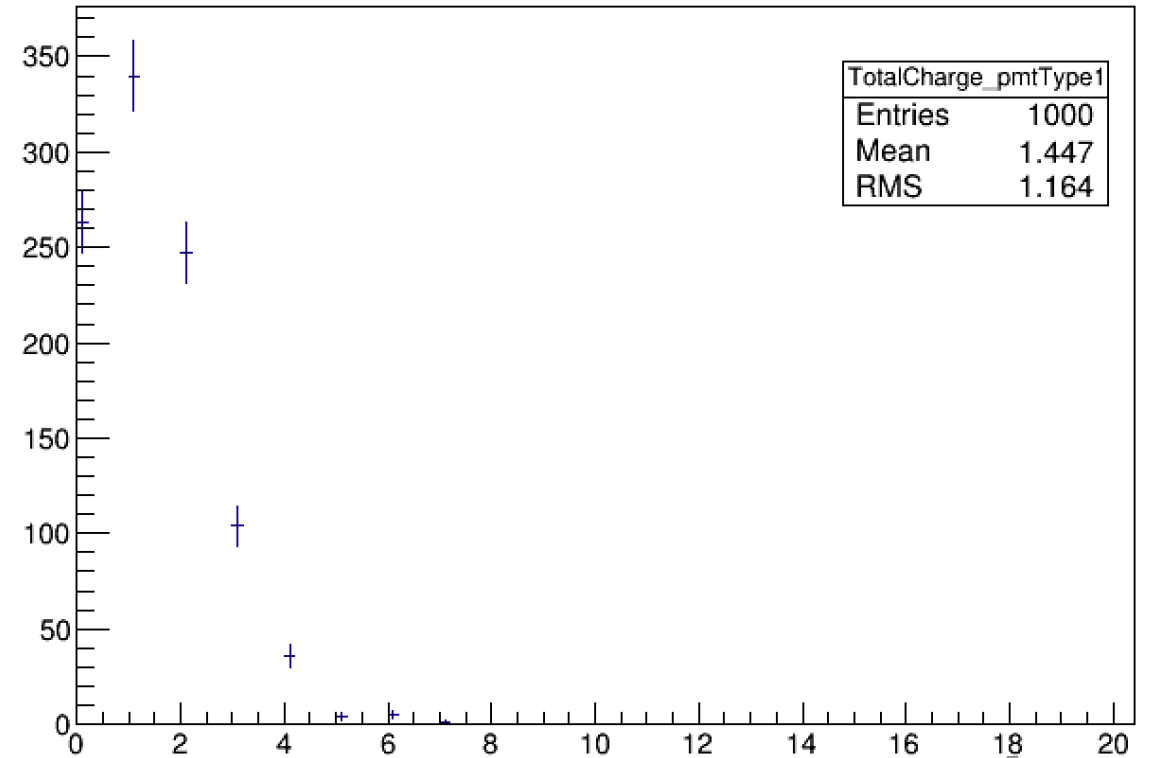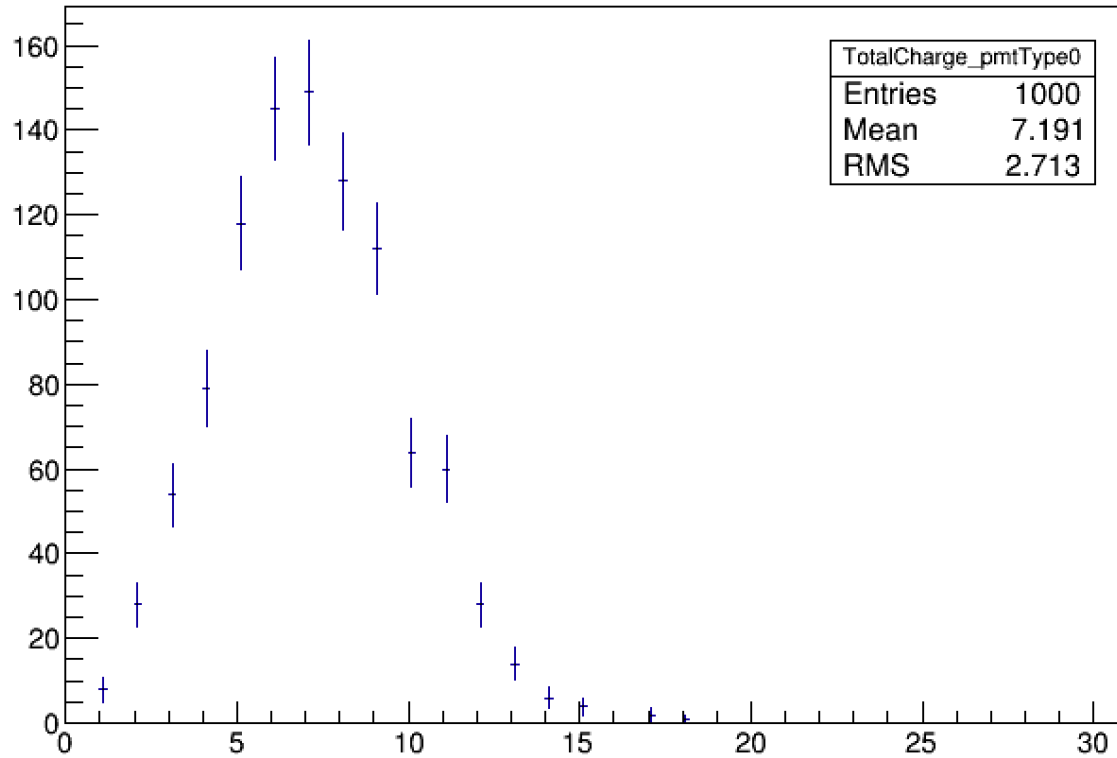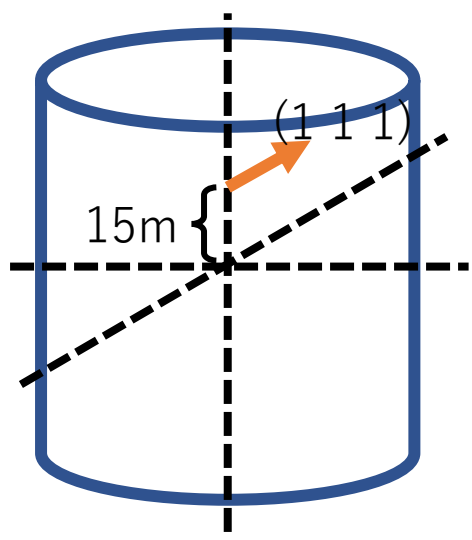
(1 1 1)

15m

with a reflector
plotDigitized false
Took only triggered events (Mode 0)
Setdarkwindow 0

## Total Charge



| TotalCharge_pmtType0 | |
|---|---|
| Entries | 1000 |
| Mean | 7.191 |
| RMS | 2.713 |

| TotalCharge_pmtType1 | |
|---|---|
| Entries | 1000 |
| Mean | 1.447 |
| RMS | 1.164 |

```
193  /mygen/generator laser
194  /gps/particle opticalphoton
195  /gps/energy 2.58 eV
196  /gps/direction 1 1 1
197  /gps/position 0 0 15 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
```
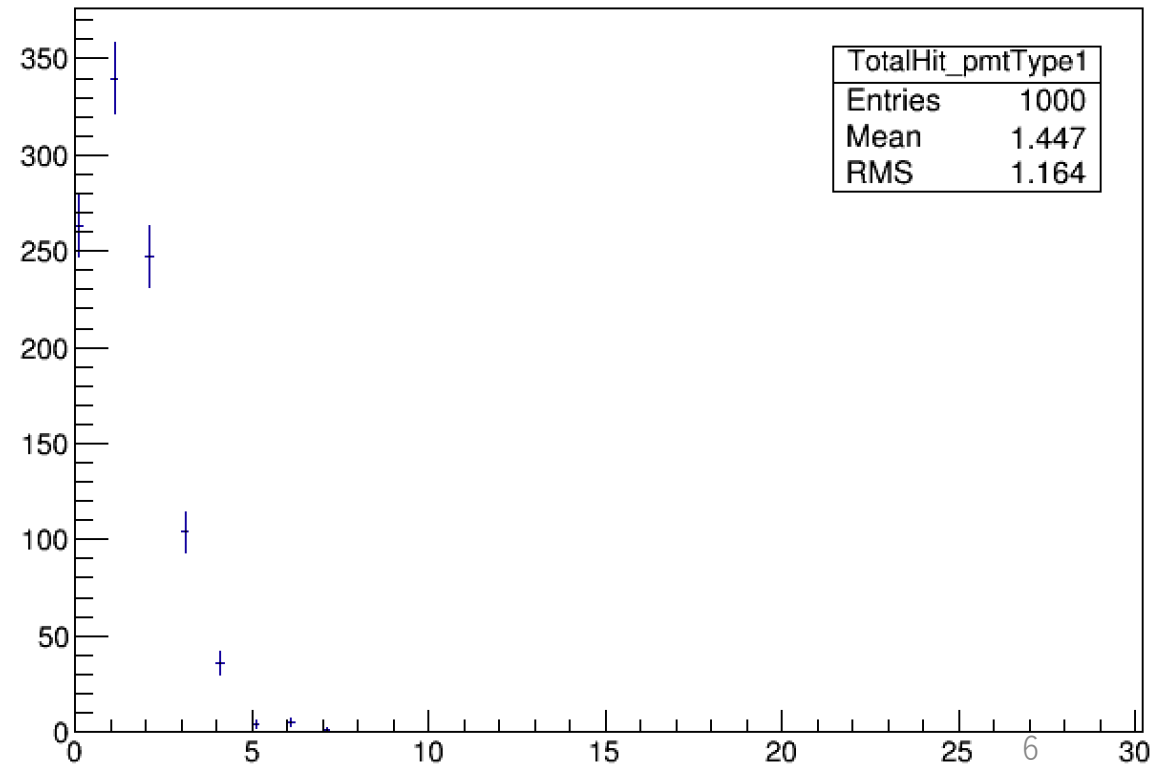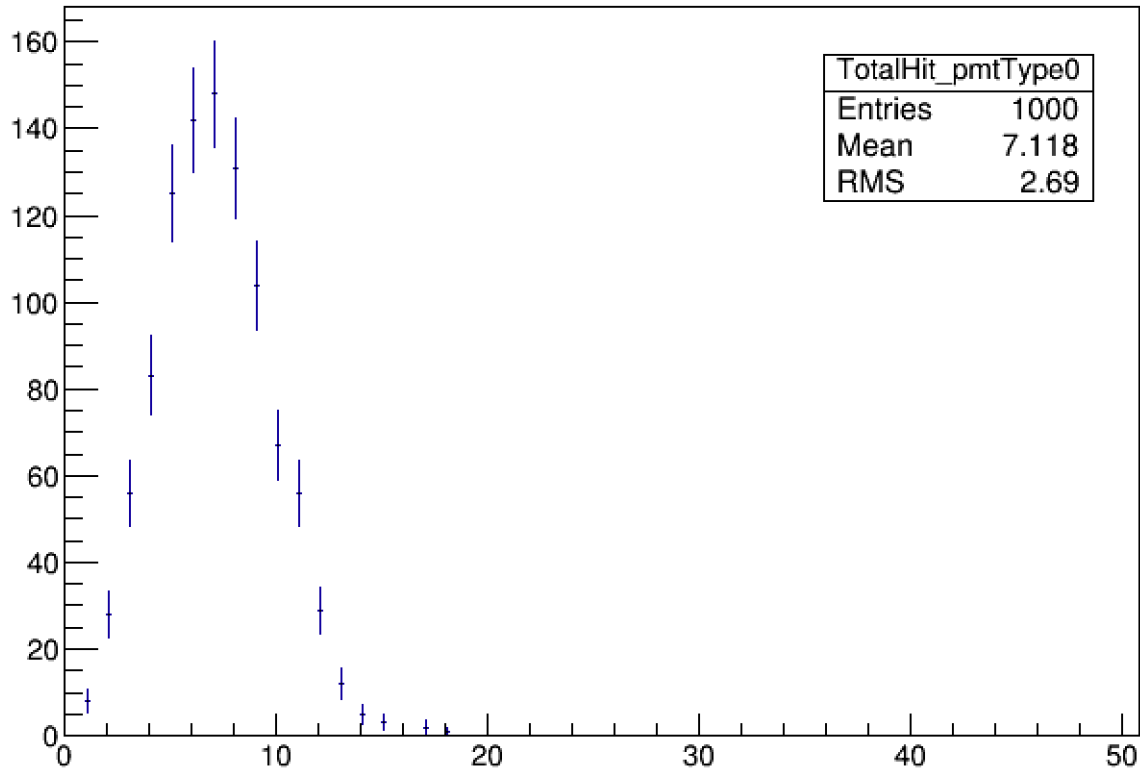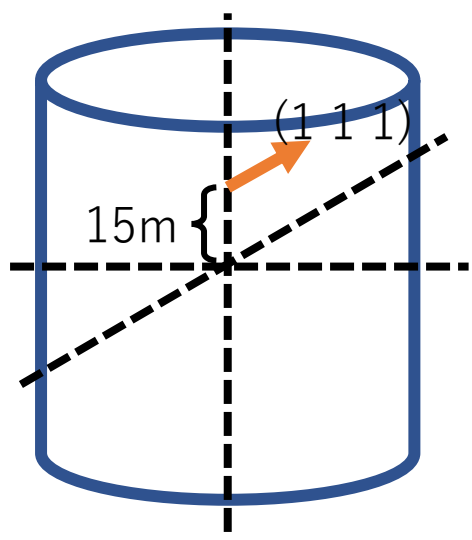
with a reflector
plotDigitized false
Took only triggered events (Mode 0)
Setdarkwindow 0

## Total Hit

| TotalHit_pmtType0 | |
| --- | --- |
| Entries | 1000 |
| Mean | 7.118 |
| RMS | 2.69 |

| TotalHit_pmtType1 | |
| --- | --- |
| Entries | 1000 |
| Mean | 1.447 |
| RMS | 1.164 |

```
193  /mygen/generator laser
194  /gps/particle opticalphoton
195  /gps/energy 2.58 eV
196  /gps/direction 1 1 1
197  /gps/position 0 0 15 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
```

(1 1 1)
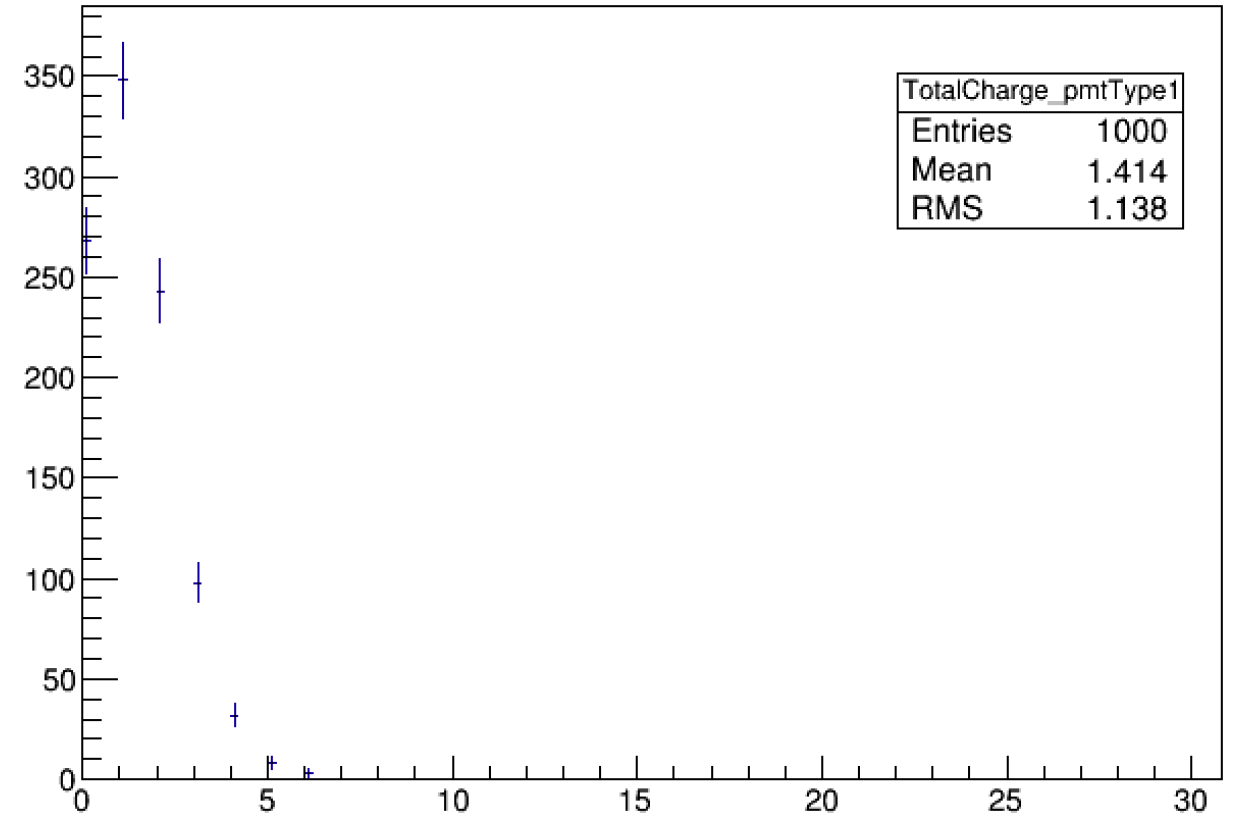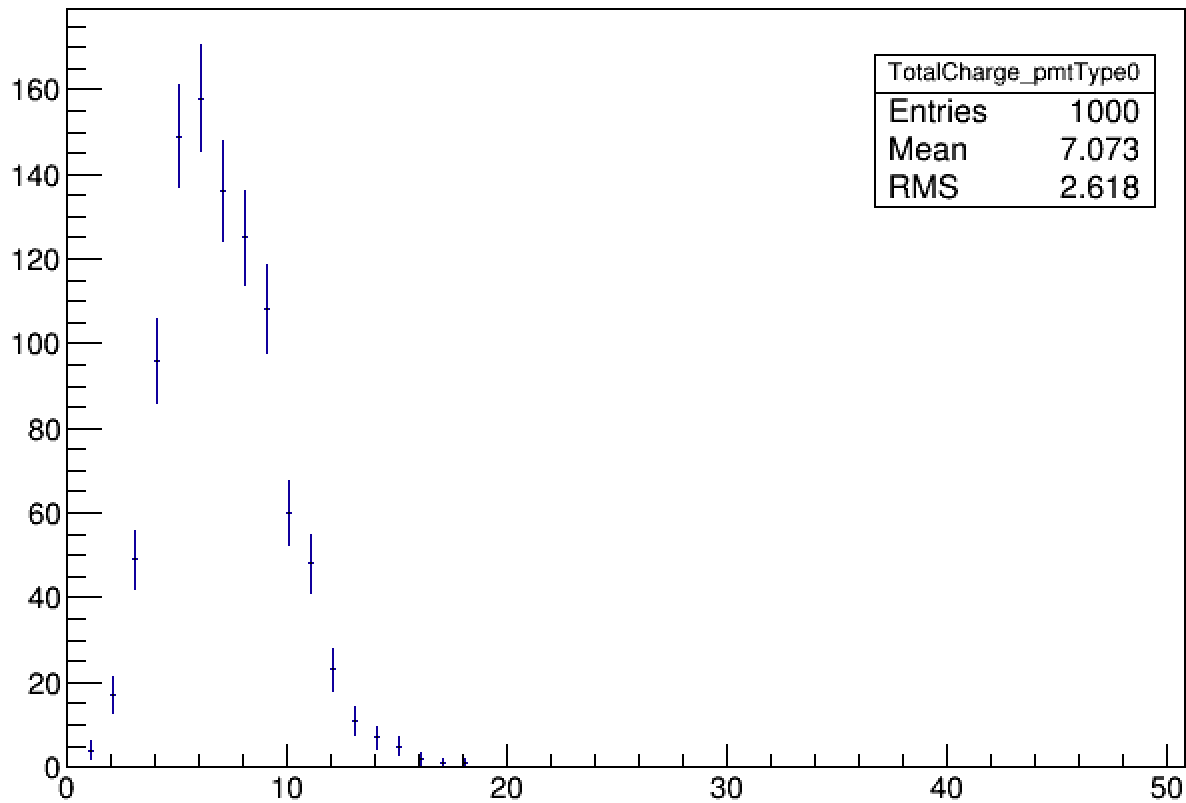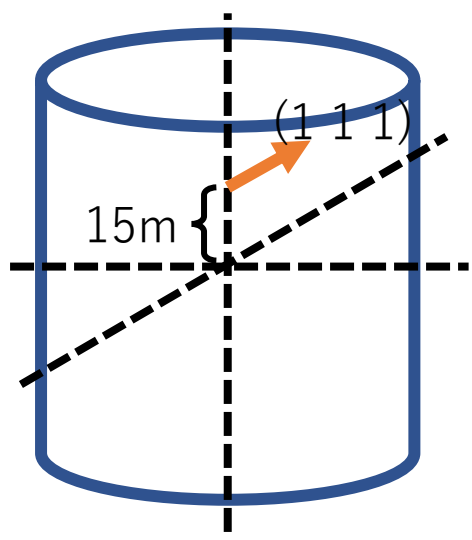
15m

without a reflector
plotDigitized false
Took only triggered events (Mode 0)
Setdarkwindow 0

## Total Charge

| TotalCharge_pmtType0 | |
| --- | --- |
| Entries | 1000 |
| Mean | 7.073 |
| RMS | 2.618 |

| TotalCharge_pmtType1 | |
| --- | --- |
| Entries | 1000 |
| Mean | 1.414 |
| RMS | 1.138 |

```
193 /mygen/generator laser
194 /gps/particle opticalphoton
195 /gps/energy 2.58 eV
196 /gps/direction 1 1 1
197 /gps/position 0 0 15 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
```
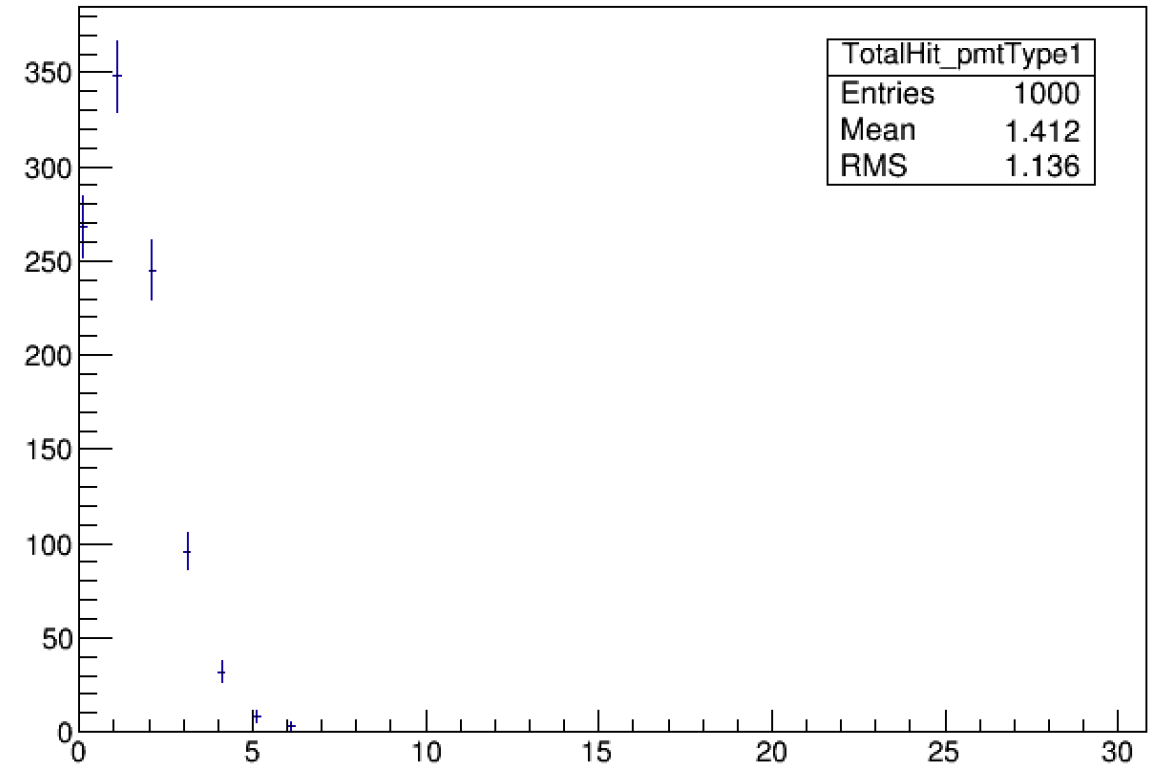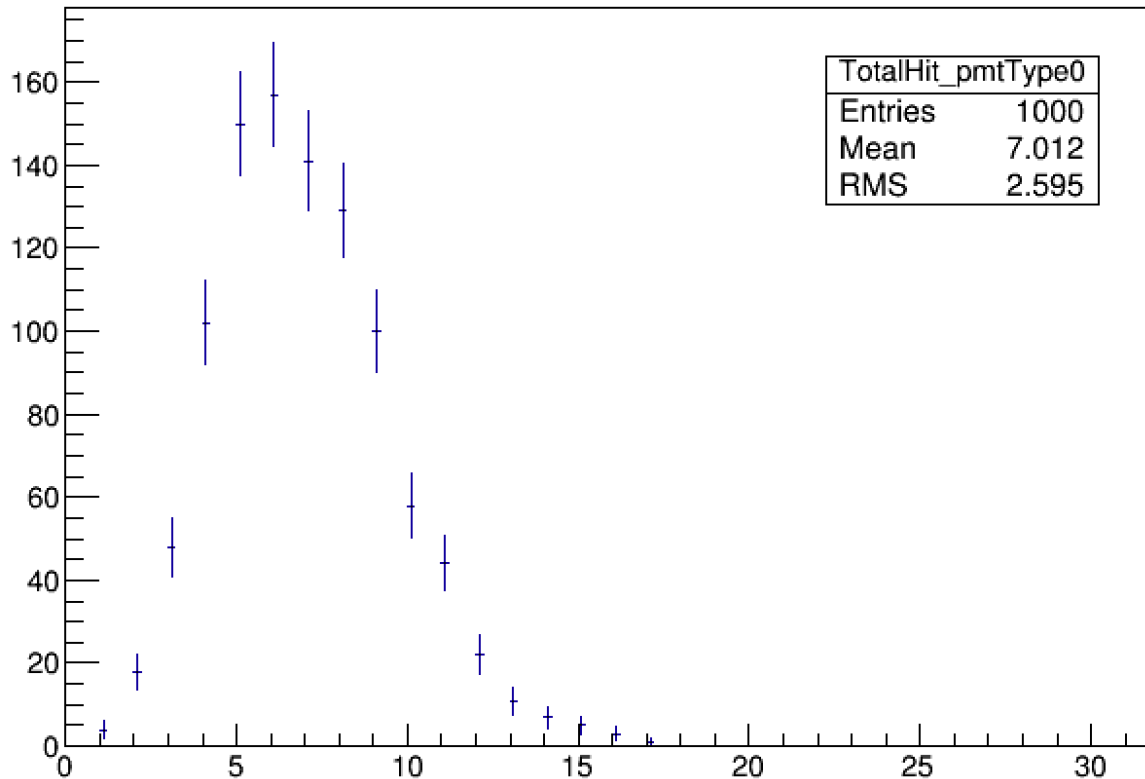
(1 1 1)

15m

without a reflector
plotDigitized false
Took only triggered events (Mode 0)
Setdarkwindow 0

## Total Hit

| TotalHit_pmtType0 | |
|---|---|
| Entries | 1000 |
| Mean | 7.012 |
| RMS | 2.595 |

| TotalHit_pmtType1 | |
|---|---|
| Entries | 1000 |
| Mean | 1.412 |
| RMS | 1.136 |

Focusing on mPMT, the mean of

## Total Charge

|  | with a reflector | without a reflector |
|---|---|---|
| true | 1.018 | 0.1166 |
| false | 1.447 | 1.414 |

## Total Hit

|  | with a reflector | without a reflector |
|---|---|---|
| true | 1.016 | 0.115 |
| false | 1.447 | 1.412 |