

Milliqan Bar Meeting

8/14/2019

Reminder

- Goal is to figure out discrepancy for higher light yield seen in the black paper wrapped bar vs. tyvek wrapped bar
- Originally tyvek bar did not have a mu-metal shield on PMT, black paper bar did
- Attached mu-metal shield onto the PMT used for the tyvek bar this week

Update on Tyvek Bar With Mu-Metal Cover

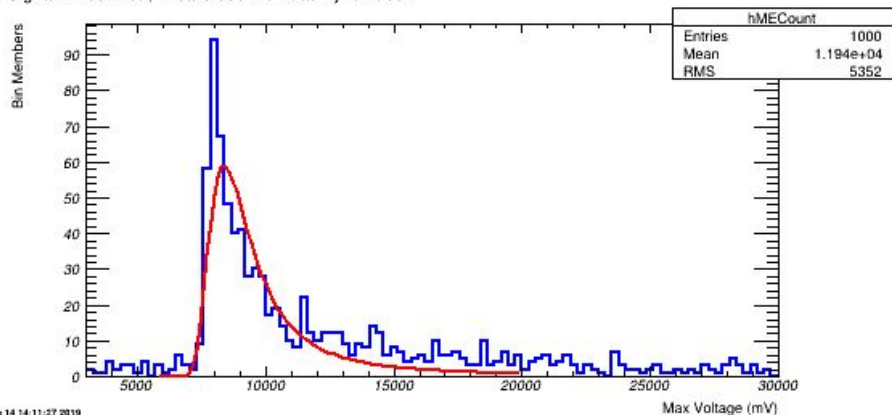
- Only Attained Data for two points, Close and InterMid (Far currently in progress)
- Only have Close point to compare with no mu-metal run for tyvek
- No noticeable difference in light yield

Close (Area) Comparison

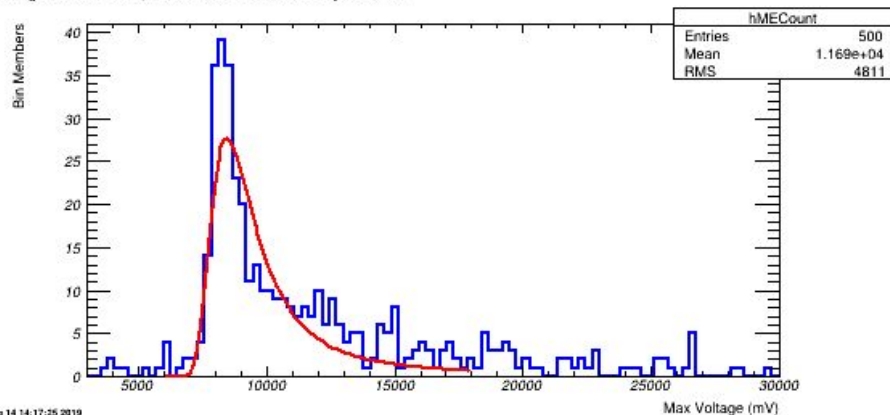
With Mu-metal
Peak Location: 8500 +/- 70 pVs

No Mu-metal
Peak Location: 8600 +/- 100 pVs

PMT Signal Pulse Area, Area Close MuMetal Tyvek 900V



PMT Signal Pulse Area, Area Close no Mumetal Tyvek 900V

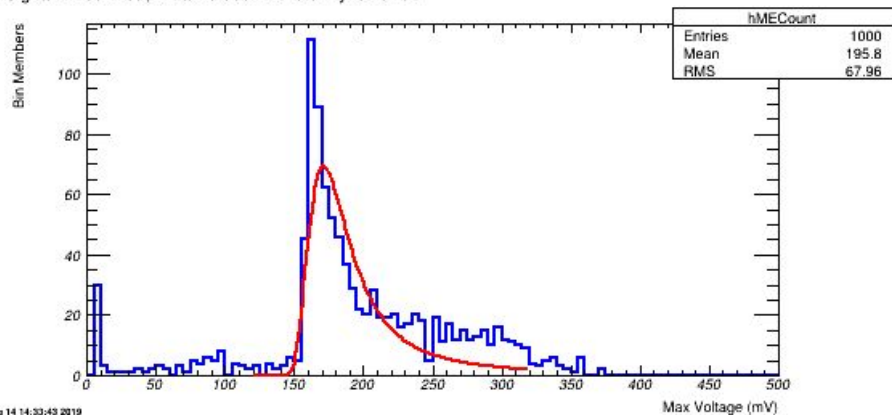


Close (V-max comparison)

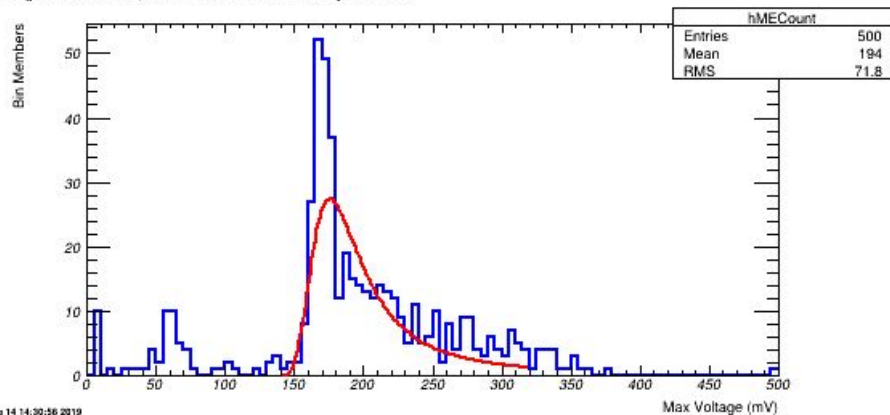
With Mu-metal
Vmax: 173 +/- 2 mV

No Mu-metal
Vmax: 180 +/- 3

PMT Signal Pulse Area, Vmax Close Mumetal Tyvek 900V



PMT Signal Pulse Area, Vmax Close no Mumetal Tyvek 900V



Plan

- Take measurements for rest of points along the bar
- Swap the PMT's on each bar