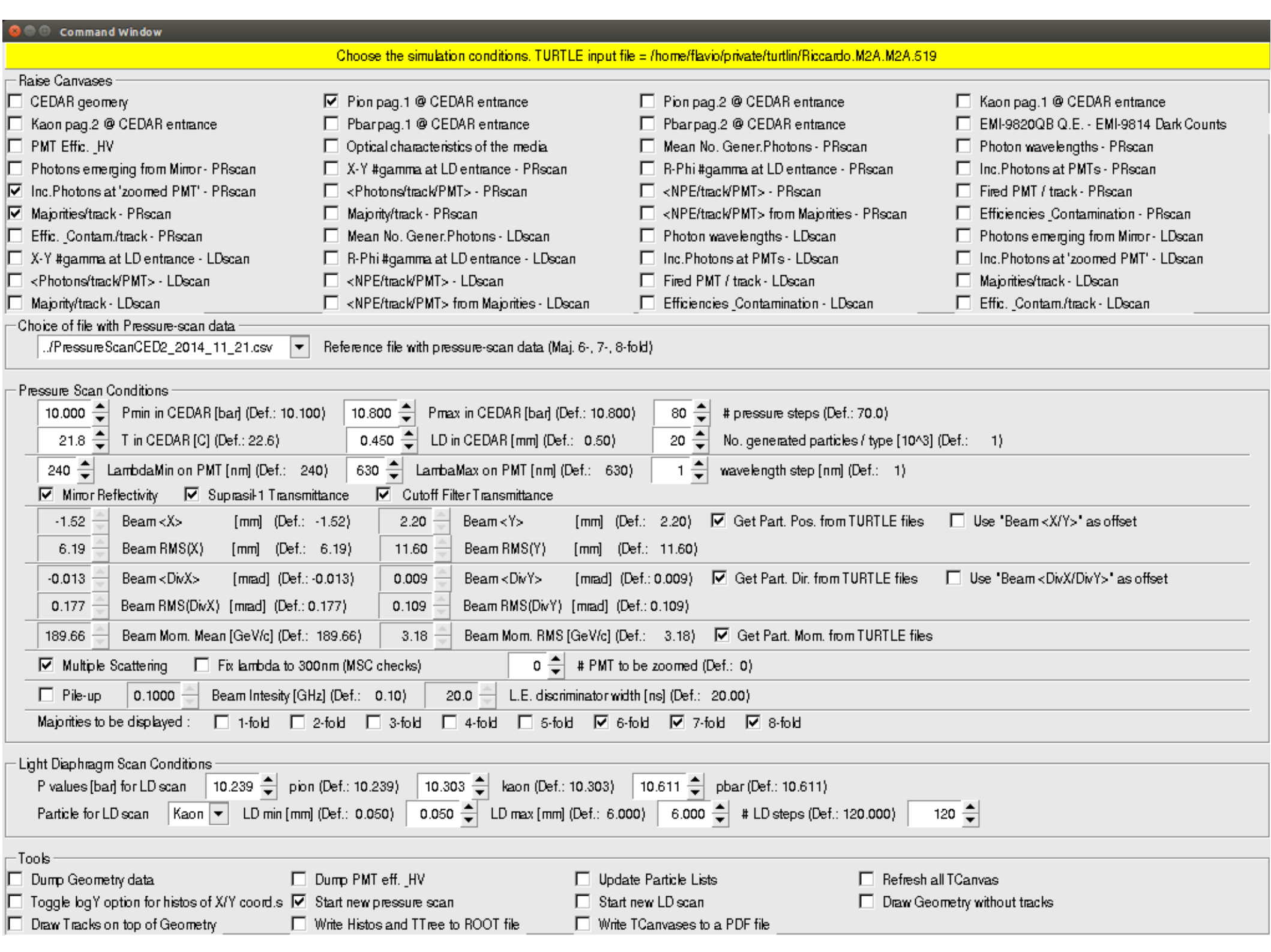
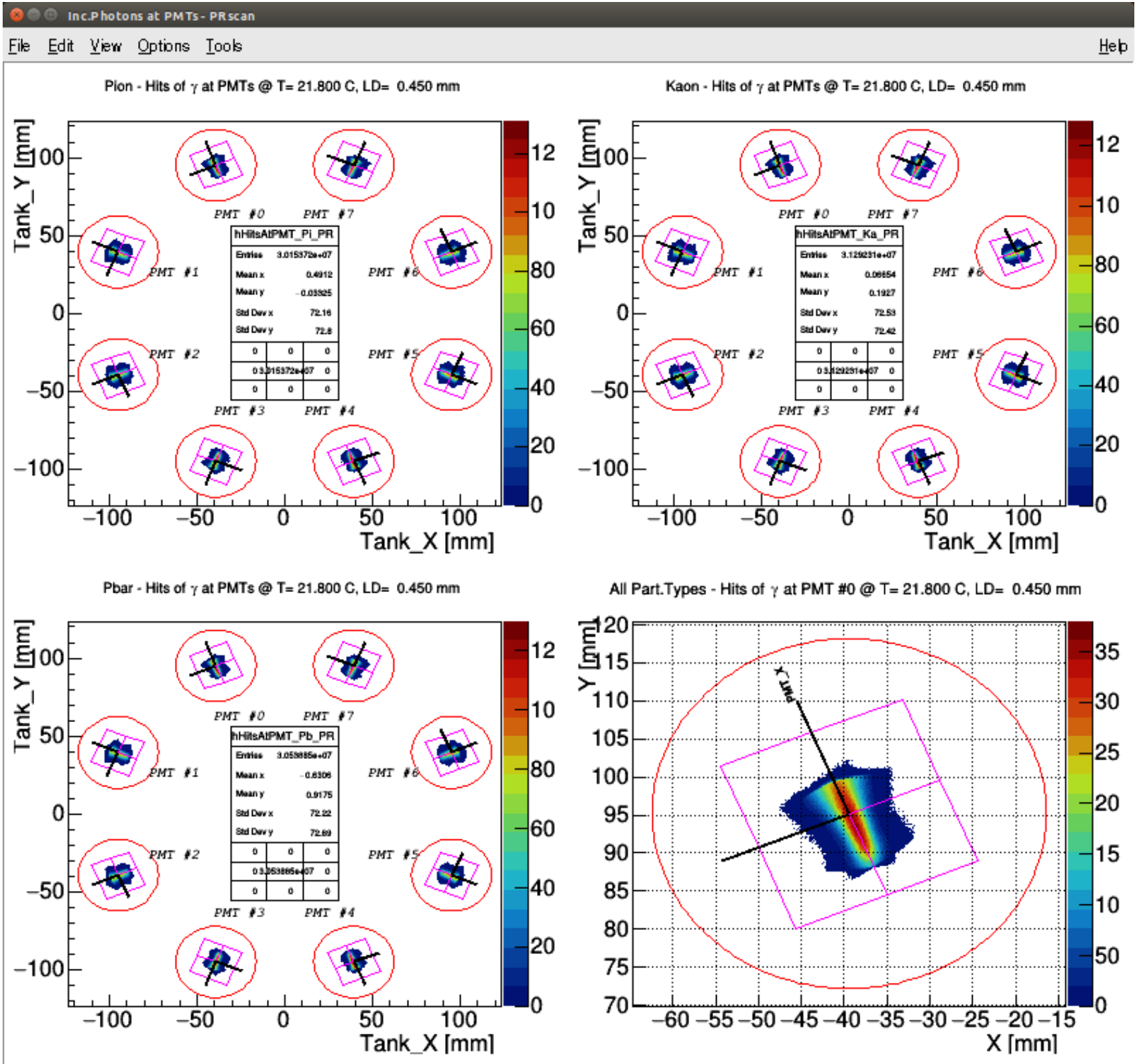
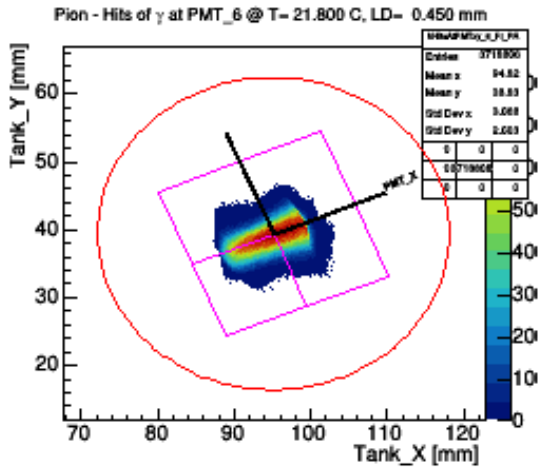
Debug of plots of hits on individual PMTs (old and new PMT shapes)
Log file : ~/…/FLVSIM_4/TestCEDAR_NewPMThitsXY_2017_05_13.log

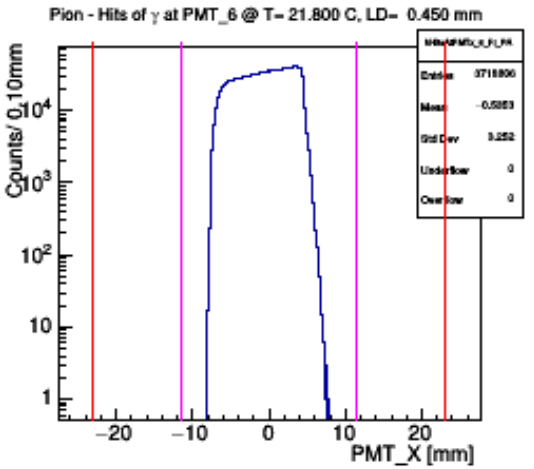

Command Window
Choose the simulation conditions. TURTLE input file = /home/flavio/private/turtlin/Riccardo.M2A.M2A.519
Raise Canvases
CEDAR geomery
Pion pag.1 @ CEDAR entrance
Pion pag.2 @ CEDAR entrance
Kaon pag.1 @ CEDAR entrance
Kaon pag.2 @ CEDAR entrance
Pbar pag.1 @ CEDAR entrance
Pbar pag.2 @ CEDAR entrance
EMI-9820QB Q.E. - EMI-9814 Dark Counts
PMT Effic. _HV
Optical characteristics of the media
Mean No. Gener.Photons - PRscan
Photon wavelengths - PRscan
Photons emerging from Mirror - PRscan
X-Y #gamma at LD entrance - PRscan
R-Phi #gamma at LD entrance - PRscan
Inc.Photons at PMTs - PRscan
Inc.Photons at 'zoomed PMT' - PRscan
<Photons/track/PMT> - PRscan
<NPE/track/PMT> - PRscan
Fired PMT / track - PRscan
Majorities/track - PRscan
Majority/track - PRscan
<NPE/track/PMT> from Majorities - PRscan
Efficiencies _Contamination - PRscan
Effic. _Contam./track - PRscan
Mean No. Gener.Photons - LDscan
Photon wavelengths - LDscan
Photons emerging from Mirror - LDscan
X-Y #gamma at LD entrance - LDscan
R-Phi #gamma at LD entrance - LDscan
Inc.Photons at PMTs - LDscan
Inc.Photons at 'zoomed PMT' - LDscan
<Photons/track/PMT> - LDscan
<NPE/track/PMT> - LDscan
Fired PMT / track - LDscan
Majorities/track - LDscan
Majority/track - LDscan
<NPE/track/PMT> from Majorities - LDscan
Efficiencies _Contamination - LDscan
Effic. _Contam./track - LDscan
Choice of file with Pressure-scan data
../PressureScanCED2_2014_11_21.csv
Reference file with pressure-scan data (Maj. 6-, 7-, 8-fold)
Pressure Scan Conditions
10.000
Pmin in CEDAR [bar] (Def.: 10.100)
10.800
Pmax in CEDAR [bar] (Def.: 10.800)
80
pressure steps (Def.: 70.0)
21.8
T in CEDAR [C] (Def.: 22.6)
0.450
LD in CEDAR [mm] (Def.: 0.50)
20
No. generated particles / type [10^3] (Def.: 1)
240
LambdaMin on PMT [nm] (Def.: 240)
630
LambaMax on PMT [nm] (Def.: 630)
1
wavelength step [nm] (Def.: 1)
Mirror Reflectivity
Suprasil-1 Transmittance
Cutoff Filter Transmittance
-1.52
Beam <X> [mm] (Def.: -1.52)
2.20
Beam <Y> [mm] (Def.: 2.20)
Get Part. Pos. from TURTLE files
Use "Beam <X/Y>" as offset
6.19
Beam RMS(X) [mm] (Def.: 6.19)
11.60
Beam RMS(Y) [mm] (Def.: 11.60)
-0.013
Beam <DivX> [mrad] (Def.: -0.013)
0.009
Beam <DivY> [mrad] (Def.: 0.009)
Get Part. Dir. from TURTLE files
Use "Beam <DivX/DivY>" as offset
0.177
Beam RMS(DivX) [mrad] (Def.: 0.177)
0.109
Beam RMS(DivY) [mrad] (Def.: 0.109)
189.66
Beam Mom. Mean [GeV/c] (Def.: 189.66)
3.18
Beam Mom. RMS [GeV/c] (Def.: 3.18)
Get Part. Mom. from TURTLE files
Multiple Scattering
Fix lambda to 300nm (MSC checks)
0
PMT to be zoomed (Def.: 0)
Pile-up
0.1000
Beam Intesity [GHz] (Def.: 0.10)
20.0
L.E. discriminator width [ns] (Def.: 20.00)
Majorities to be displayed :
1-fold
2-fold
3-fold
4-fold
5-fold
6-fold
7-fold
8-fold
Light Diaphragm Scan Conditions
P values [bar] for LD scan
10.239
pion (Def.: 10.239)
10.303
kaon (Def.: 10.303)
10.611
pbar (Def.: 10.611)
Particle for LD scan
Kaon
LD min [mm] (Def.: 0.050)
0.050
LD max [mm] (Def.: 6.000)
6.000
LD steps (Def.: 120.000)
120
Tools
Dump Geometry data
Dump PMT eff. _HV
Update Particle Lists
Refresh all TCanvas
Toggle logY option for histos of X/Y coord.s
Start new pressure scan
Start new LD scan
Draw Geometry without tracks
Draw Tracks on top of Geometry
Write Histos and TTree to ROOT file
Write TCanvases to a PDF file

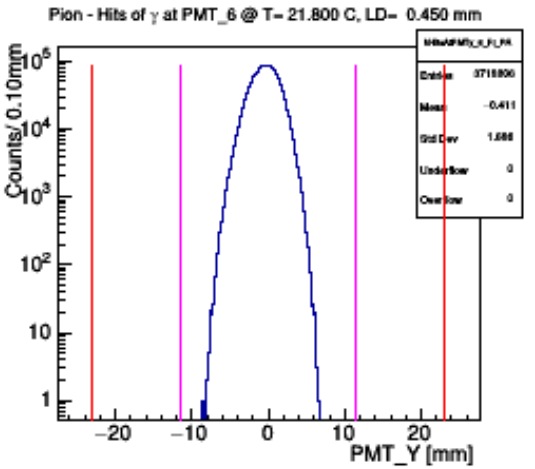

Inc.Photons at PMTs - PRscan
File Edit View Options Tools Help
Pion - Hits of γ at PMTs @ T= 21.800 C, LD= 0.450 mm
Kaon - Hits of γ at PMTs @ T= 21.800 C, LD= 0.450 mm
Pbar - Hits of γ at PMTs @ T= 21.800 C, LD= 0.450 mm
All Part.Types - Hits of γ at PMT #0 @ T= 21.800 C, LD= 0.450 mm
PMT #0
PMT #1
PMT #2
PMT #3
PMT #4
PMT #5
PMT #6
PMT #7
hHitsAtPMT_Pi_PR
hHitsAtPMT_Ka_PR
hHitsAtPMT_Pb_PR
Tank_X [mm]
Tank_Y [mm]
X [mm]
Y [mm]

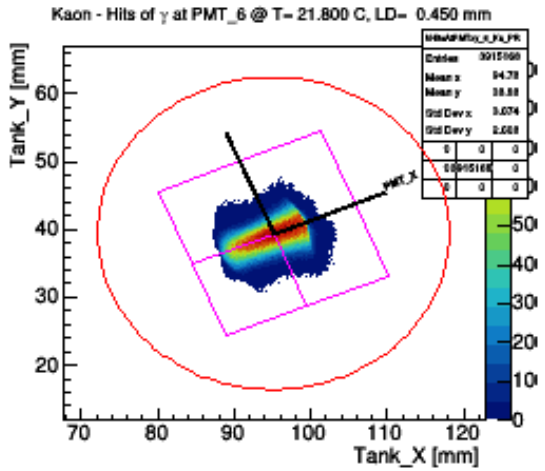
Inc.Photons at 'zoomed PMT' - PRscan

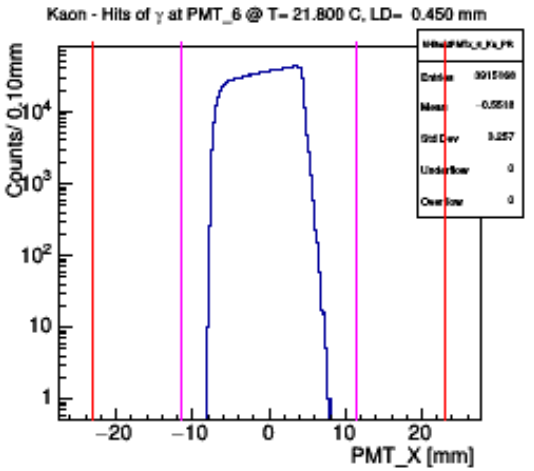
File Edit View Options Tools Help

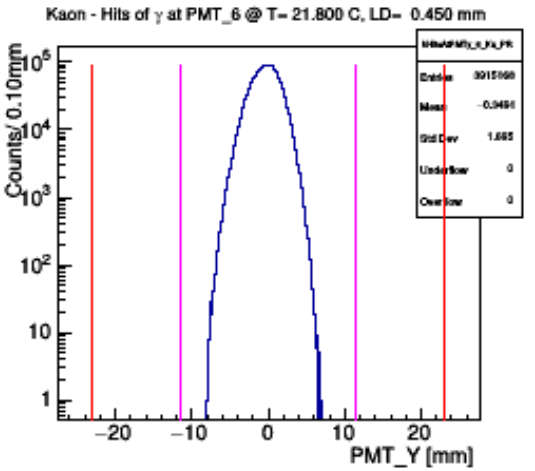


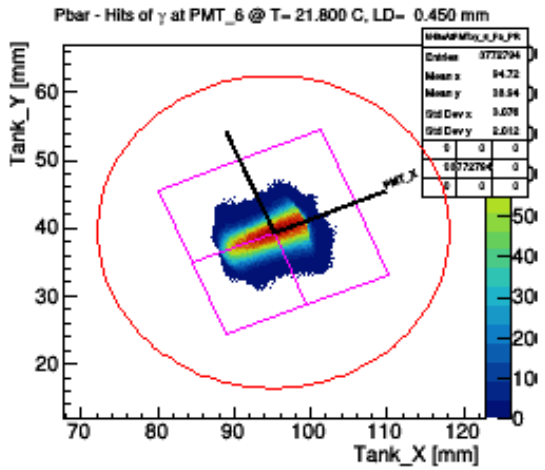


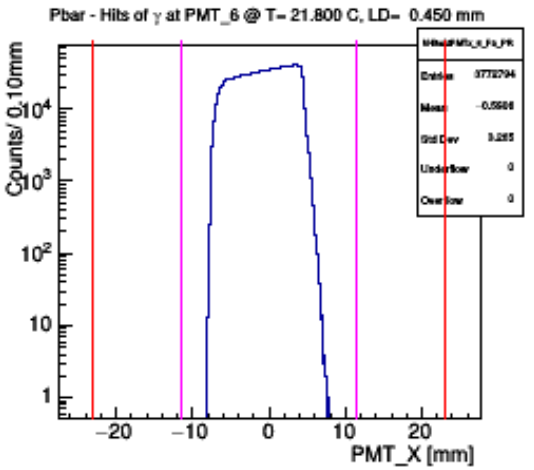


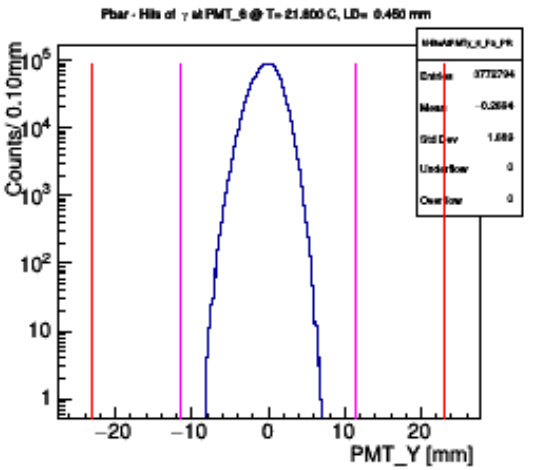






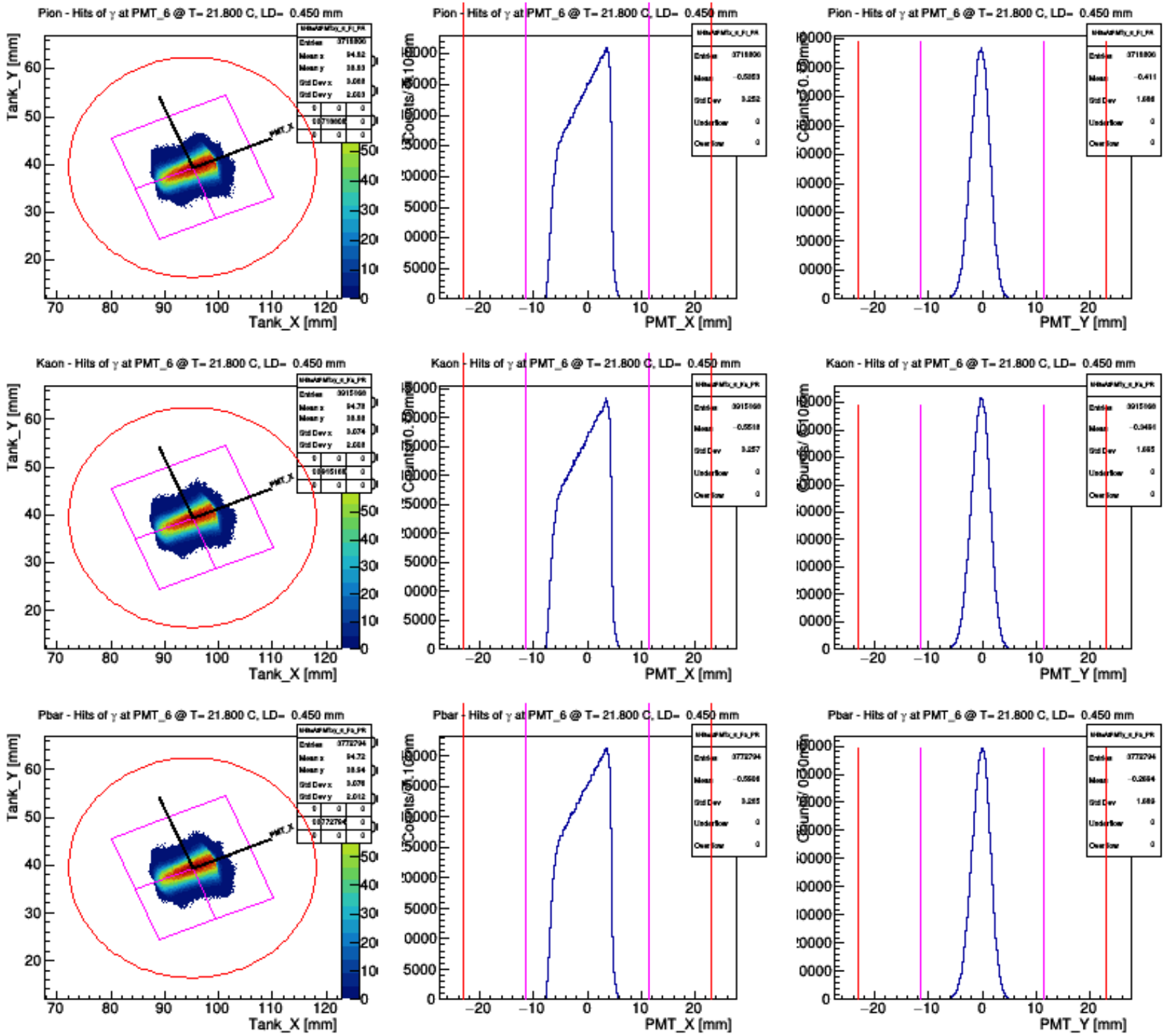






Inc.Photons at 'zoomed PMT' - PRscan

File Edit View Options Tools Help



Comparison of Q.E.