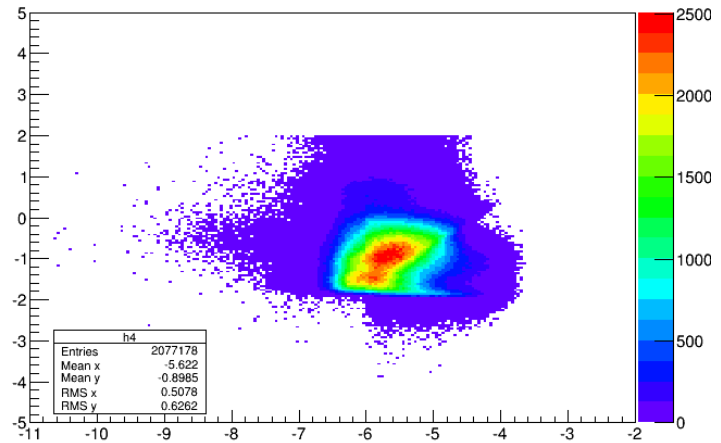
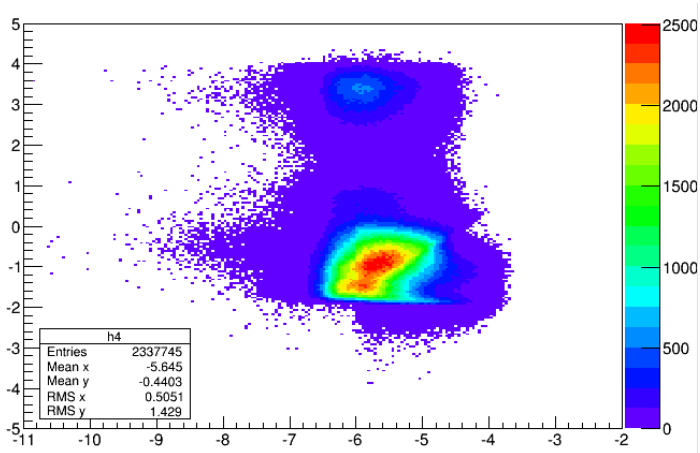


2016.05.24

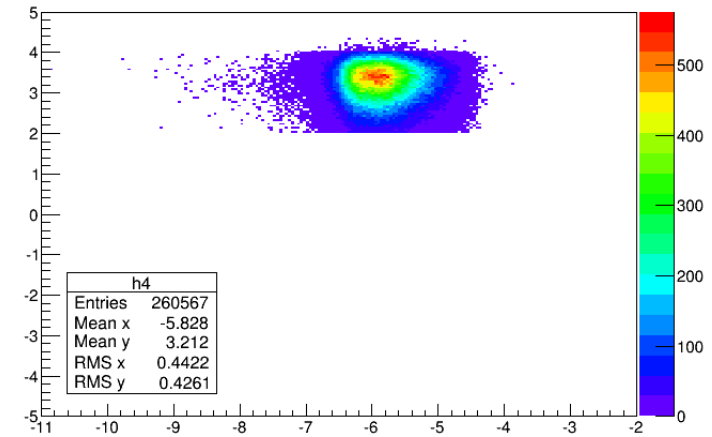
Outline

- 对于电子快慢分量的区分
- Cluster Level

Fast&Slow electron deposit



lgT(ns)

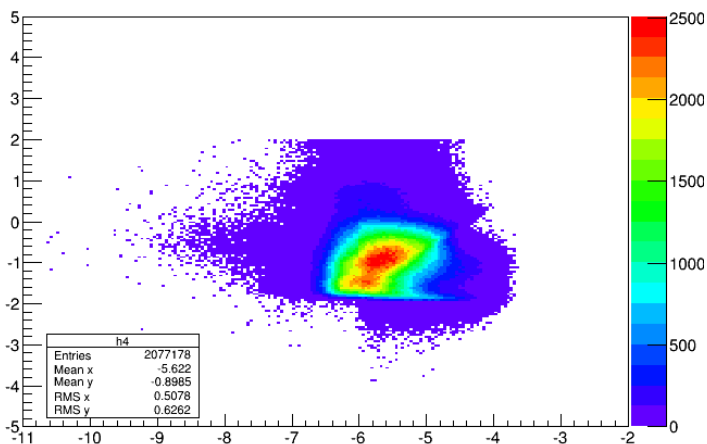


En(GeV)

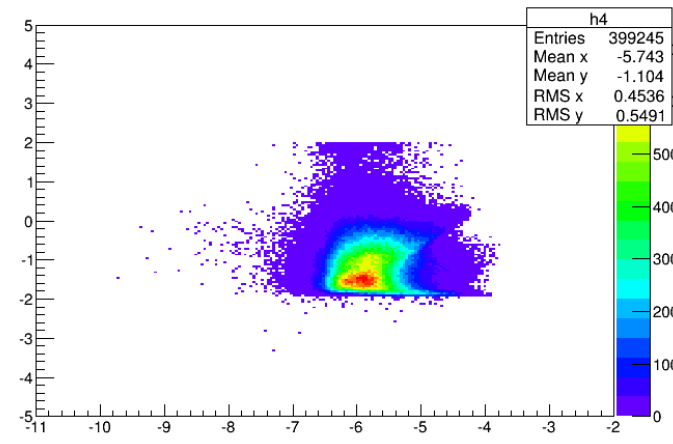
Pi+在Fe-THGEM探测器中,
~70% Hit为电子沉积,其中
<100ns 88.8%(总67%)
>100ns 11.1%(总8.4%)

回答:慢分量能否区分
(正负电子, Neighbor, AreaE, 来源粒子)

Electron & Anti-electron deposit



Fast component

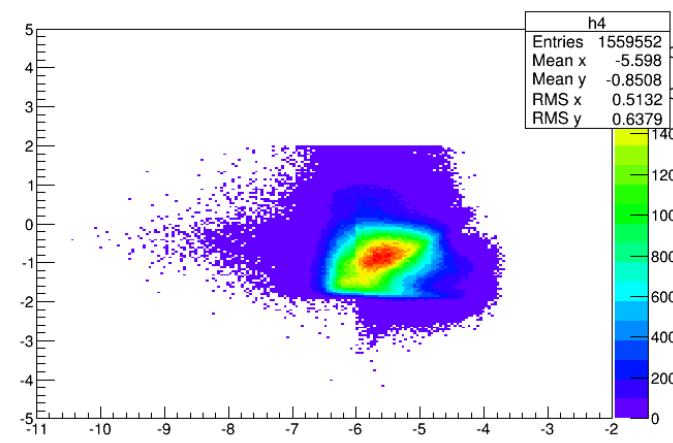


From Anti-electron

快分量中，电子主导的Hit能量稍高
时间较慢

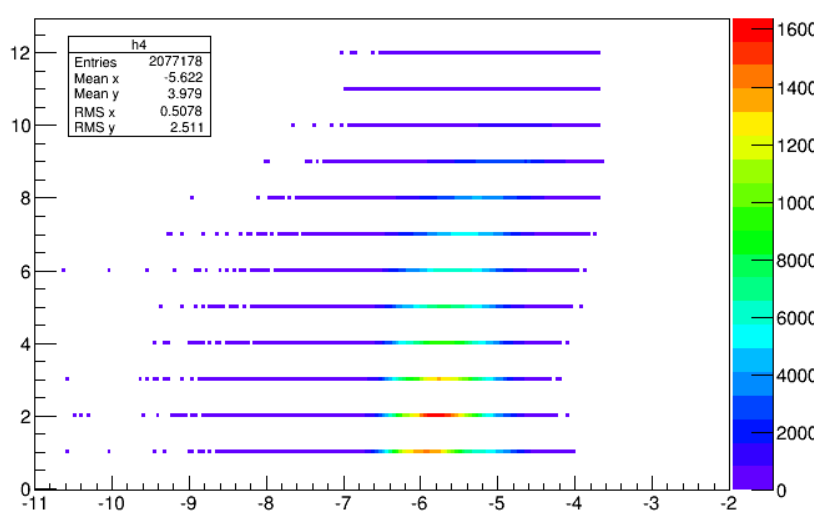
正电子主导的Hit能量较小时间较快

慢分量中无明显区别

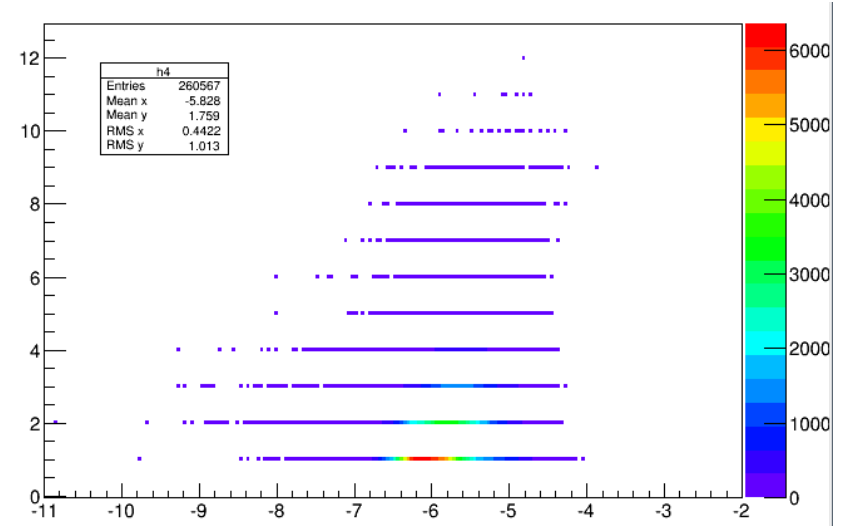


From Anti-electron

Neighbor



Fast component

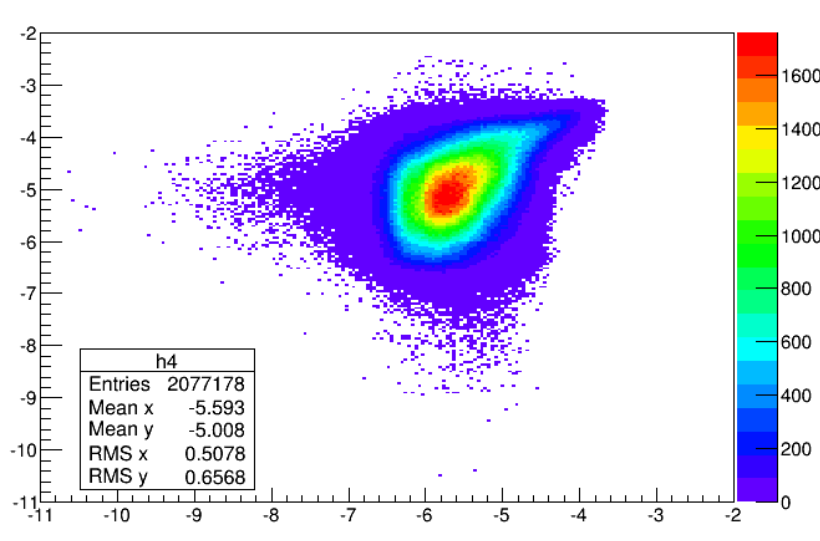


Slow component

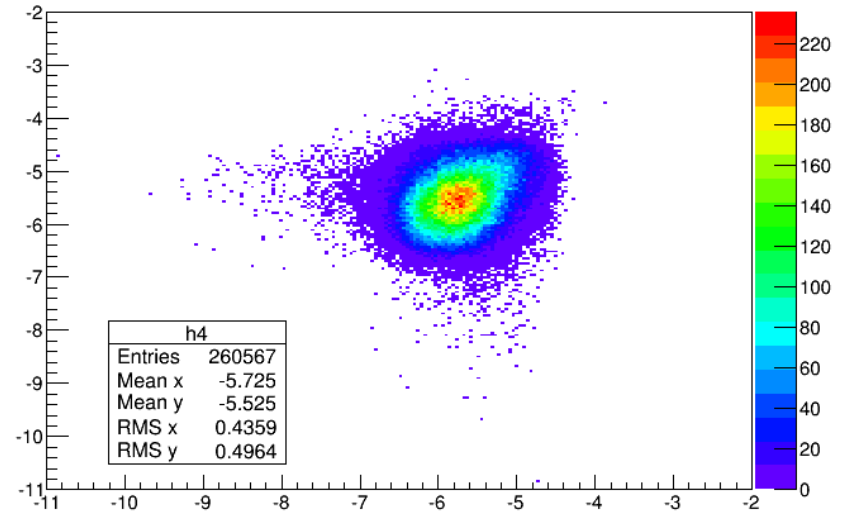
10mm Cell Size

Neighbor \geq 10的情况（最大12）还需要理解

AreaE



Fast component

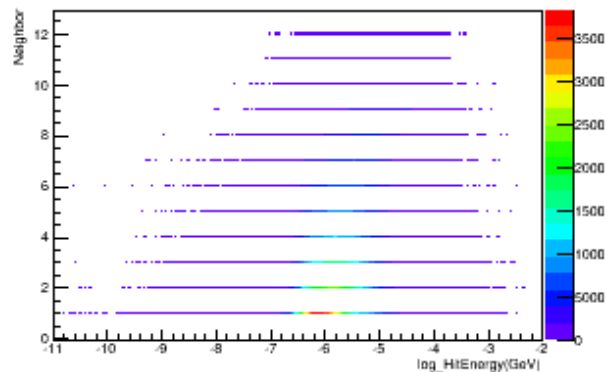


Slow component

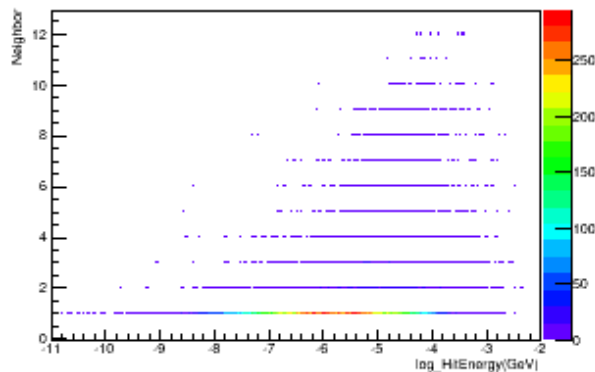
无明显区别

Neibohor

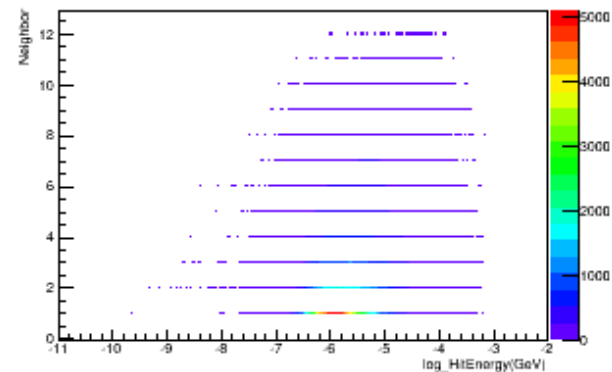
All Hit: 3099765



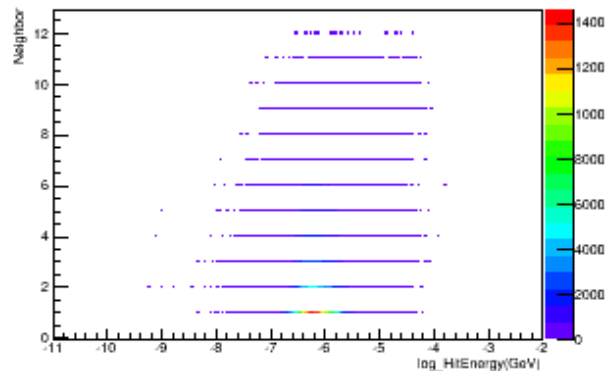
Neutron: 20658 (0.67%)



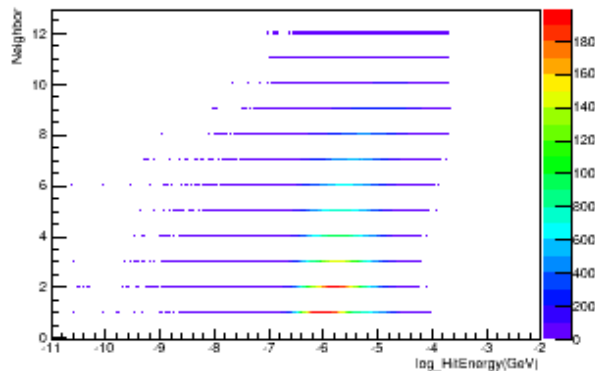
Proton: 278241 (8.98%)



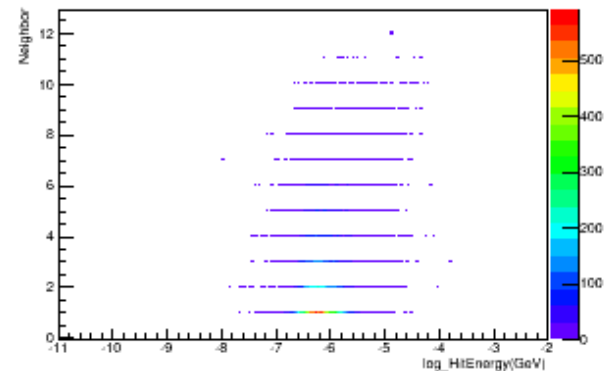
Pion: 435733 (14.06%)



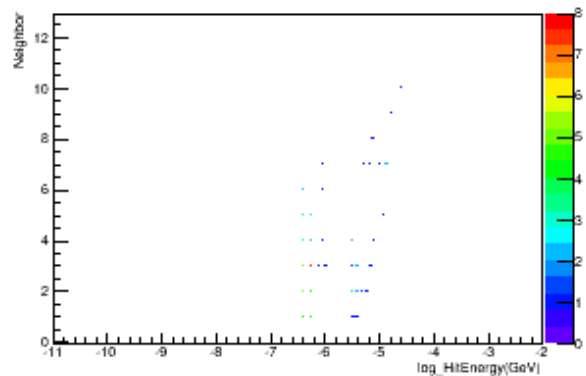
Electron: 2337745 (75.42%)



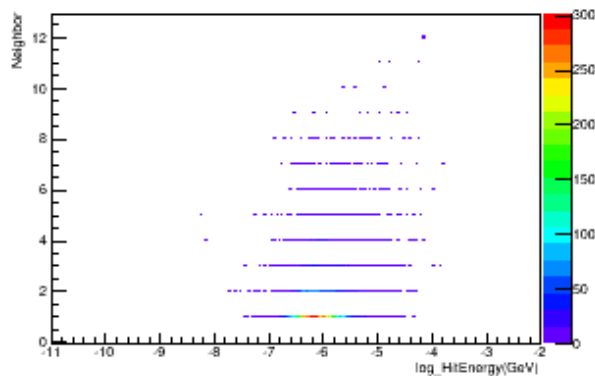
Kaon: 18744 (0.60%)



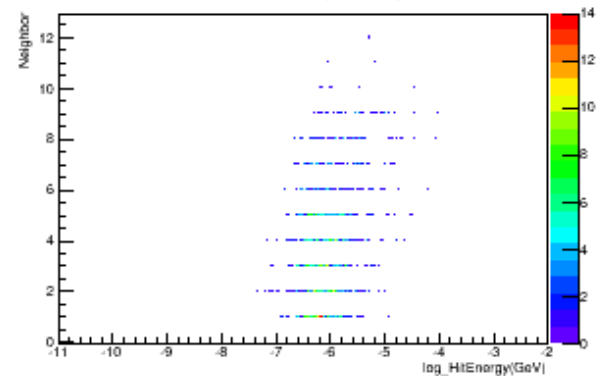
Photon: 77 (0.00%)



Muon: 7759 (0.25%)



Others: 808 (0.03%)

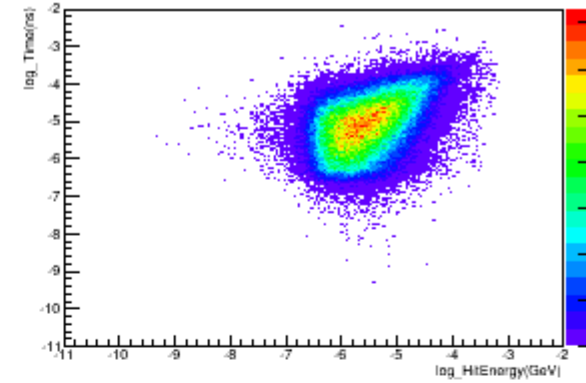
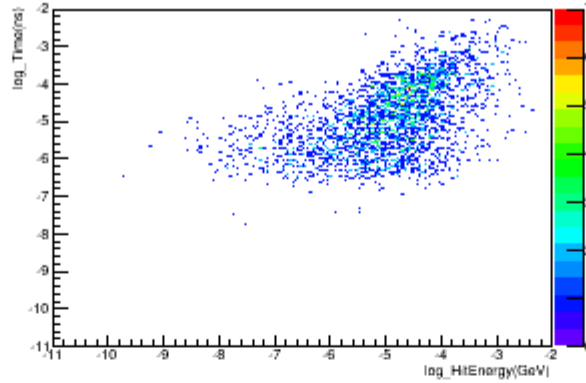
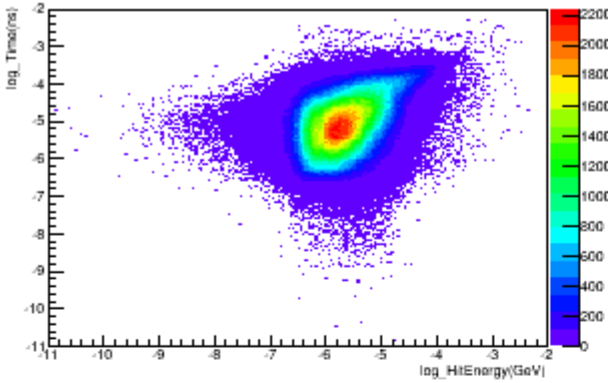


AreaE

All Hit: 3099765

Neutron: 20658 (0.67%)

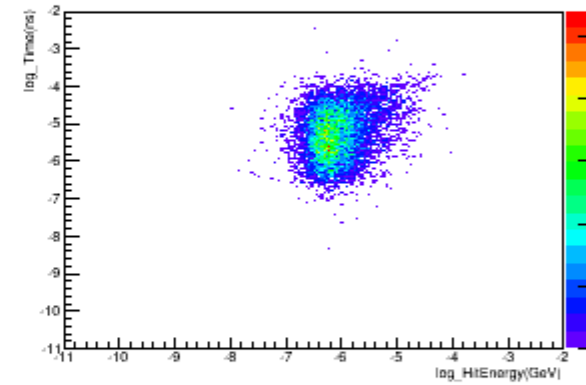
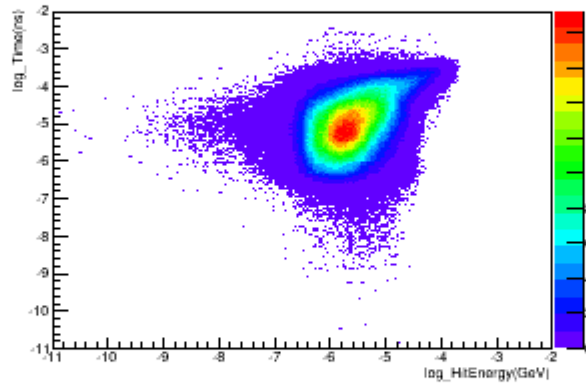
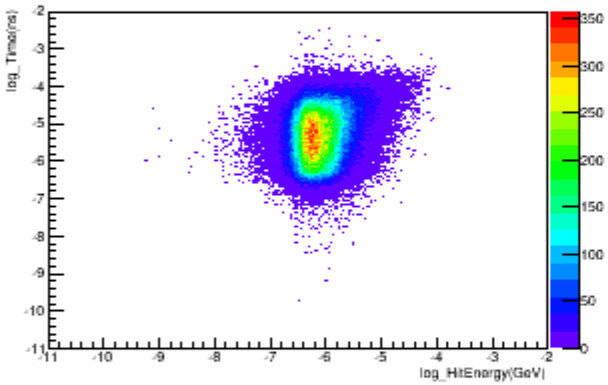
Proton: 278241 (8.98%)



Pion: 435733 (14.06%)

Electron: 2337745 (75.42%)

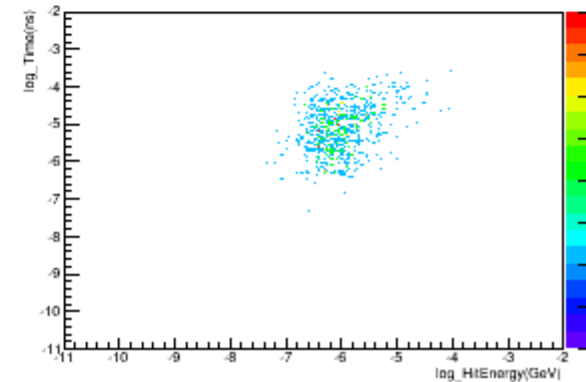
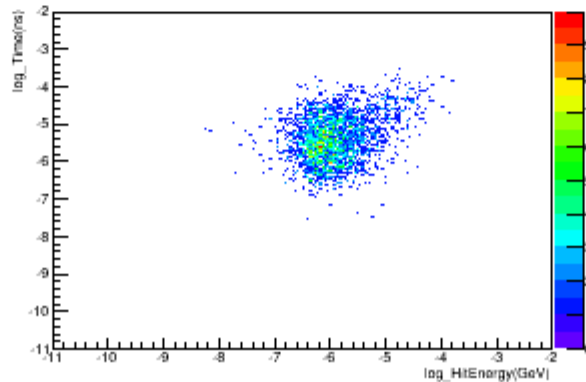
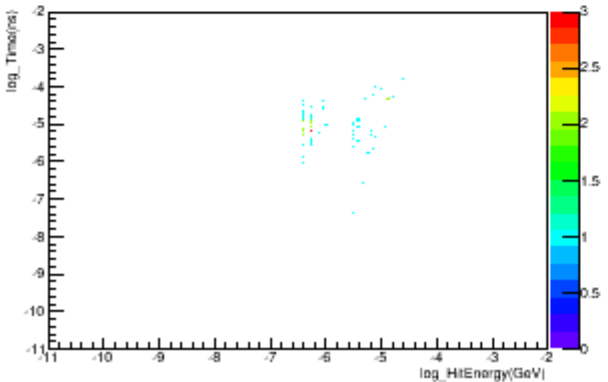
Kaon: 18744 (0.60%)



Photon: 77 (0.00%)

Muon: 7759 (0.25%)

Others: 808 (0.03%)



Cluster Level

$LCEn/TCEn$ (重建效率) $TCEn/THEn$