

# Search for time-dependent fluctuations in cosmic rays spectra with the AMS01 detector

## 1. Towards Kinetic Energy Spectra

March 1, 2006

AMS-unige meeting

# Data sample

- ~ 4 500 000 triggered events

start: June 3, 1998 5h32:39 AM GMT

AMS pointing 45 deg to Zenith

The Earth was not in AMS field of view

Shuttle altitude: 340 Km

(not full statistics for this configuration)

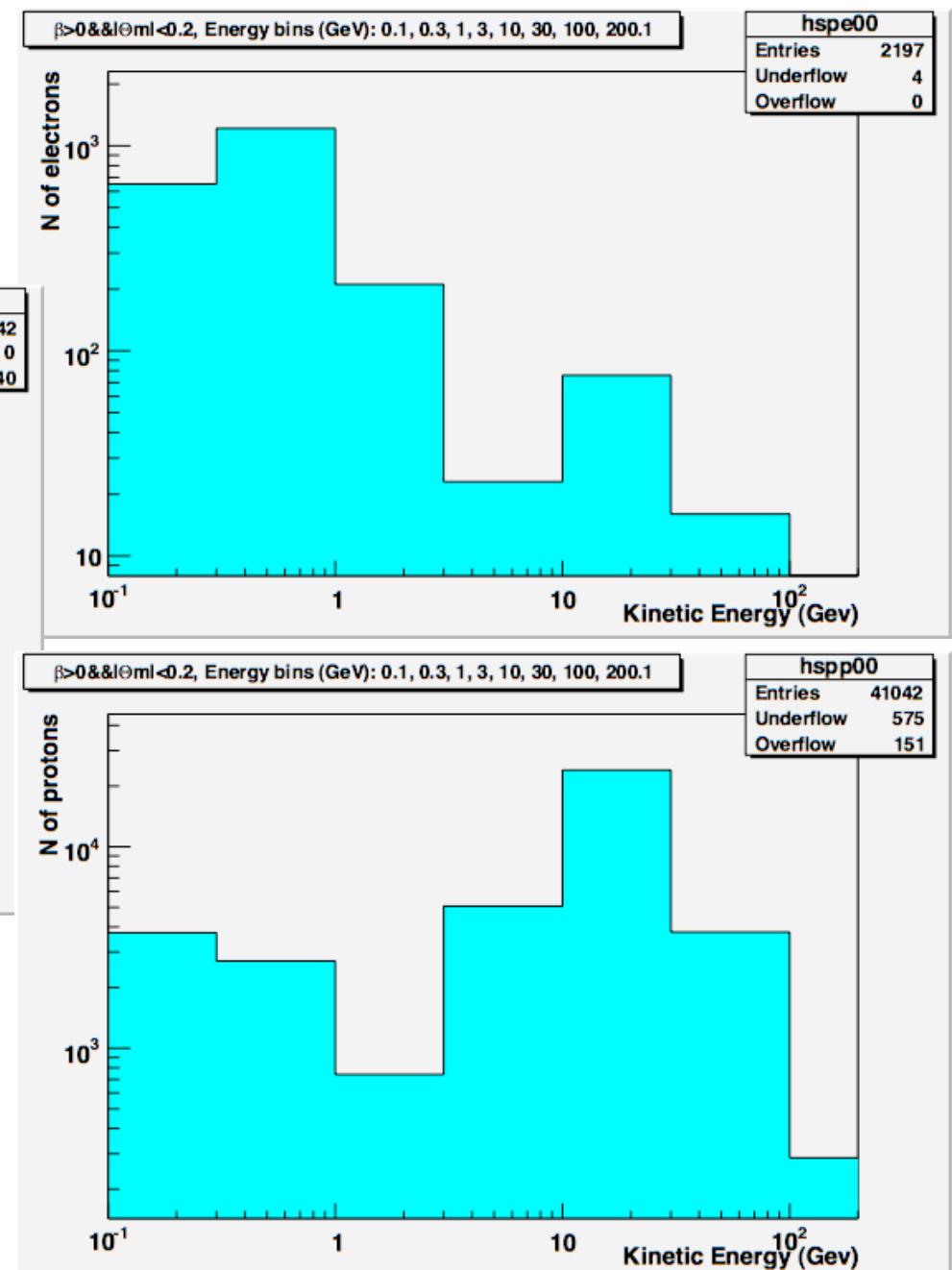
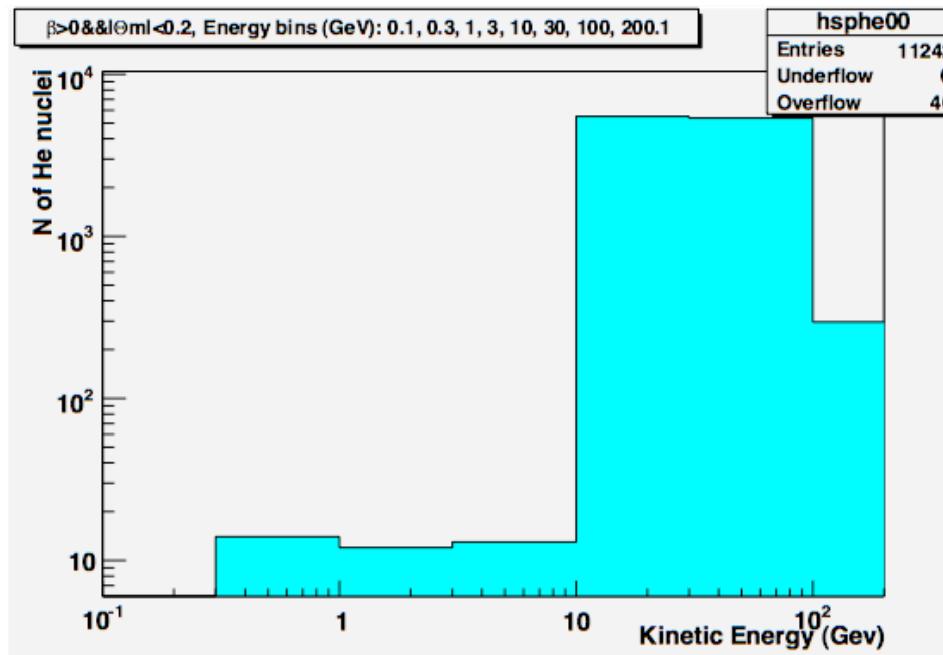
# Geomagnetic latitude, $\theta_m$ , ranges & Kinetic Energy bins

- $|\theta_m| < 0.2$
- $0.2 \leq |\theta_m| < 0.3$
- $0.3 \leq |\theta_m| < 0.4$
- $0.4 \leq |\theta_m| < 0.5$
- $0.5 \leq |\theta_m| < 0.6$
- $0.6 \leq |\theta_m| < 0.7$
- $0.7 \leq |\theta_m| < 0.8$
- $0.8 \leq |\theta_m| < 0.9$
- $0.9 \leq |\theta_m| < 1.0$
- $|\theta_m| \geq 1.0$

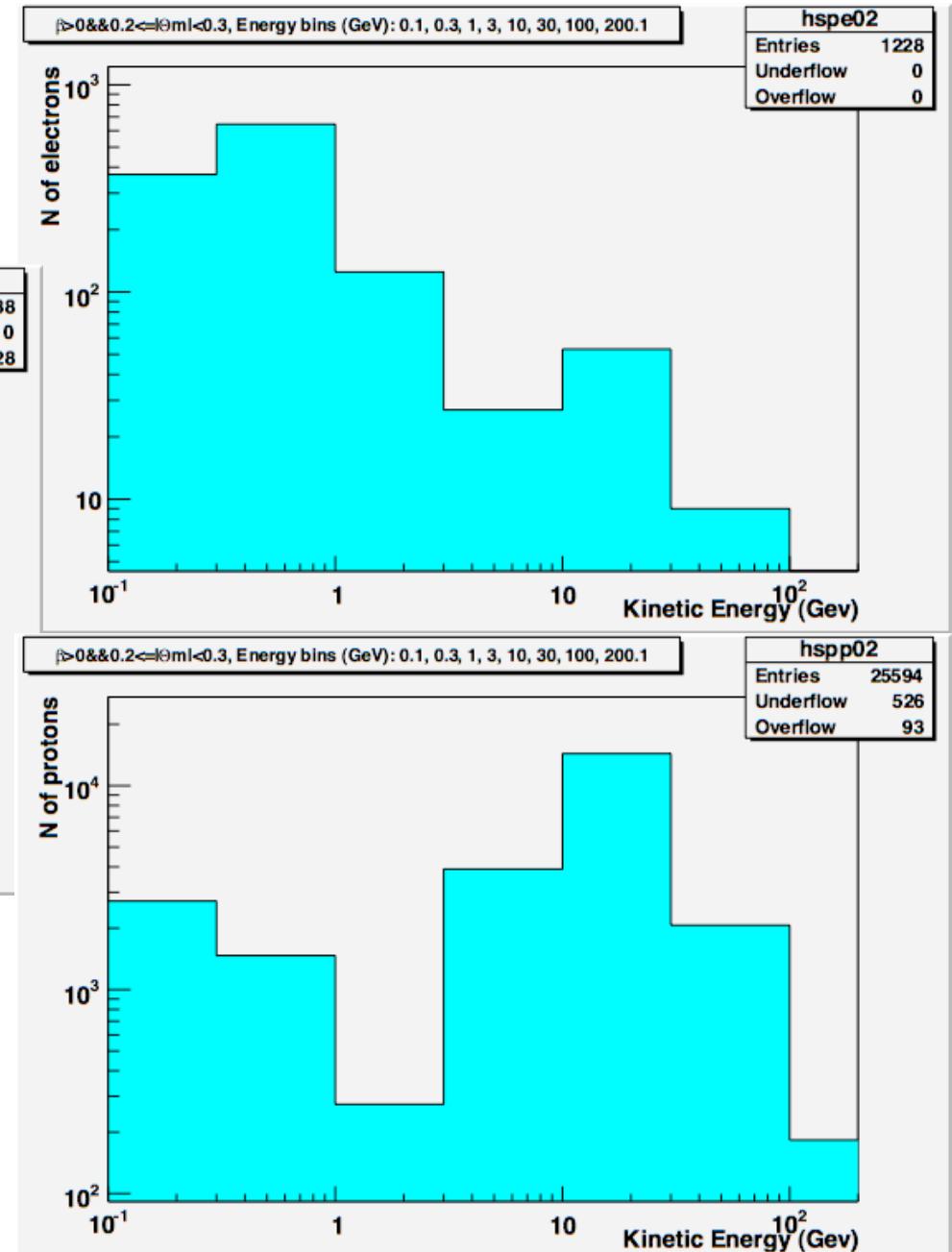
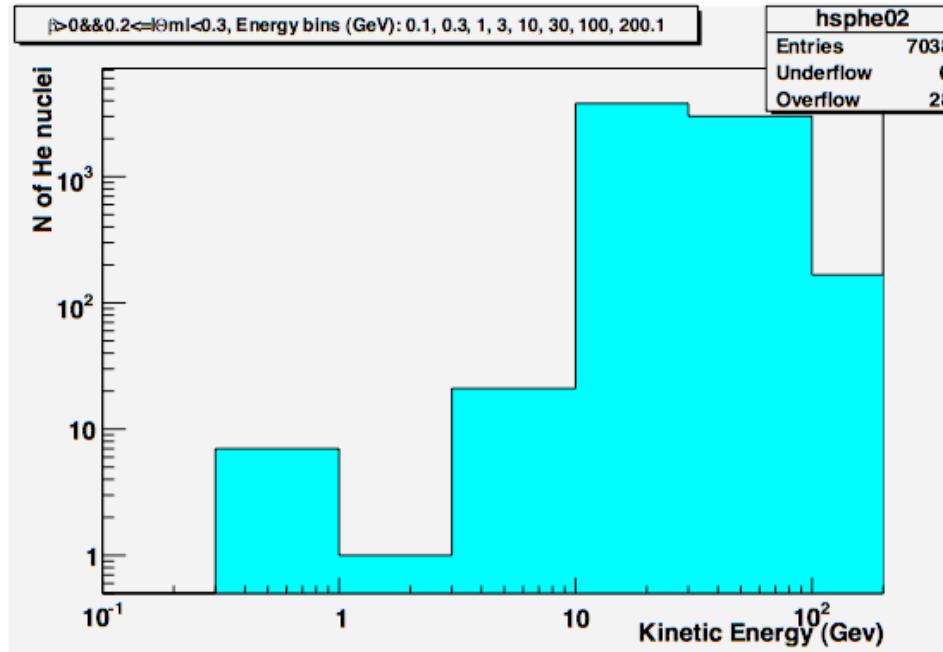
Kinetic Energy Bins (GeV):

1. 0.1 - 0.3
2. 0.3 - 1
3. 1 - 3
4. 3 - 10
5. 10 - 30
6. 30 - 100
7. 100 - 200.1

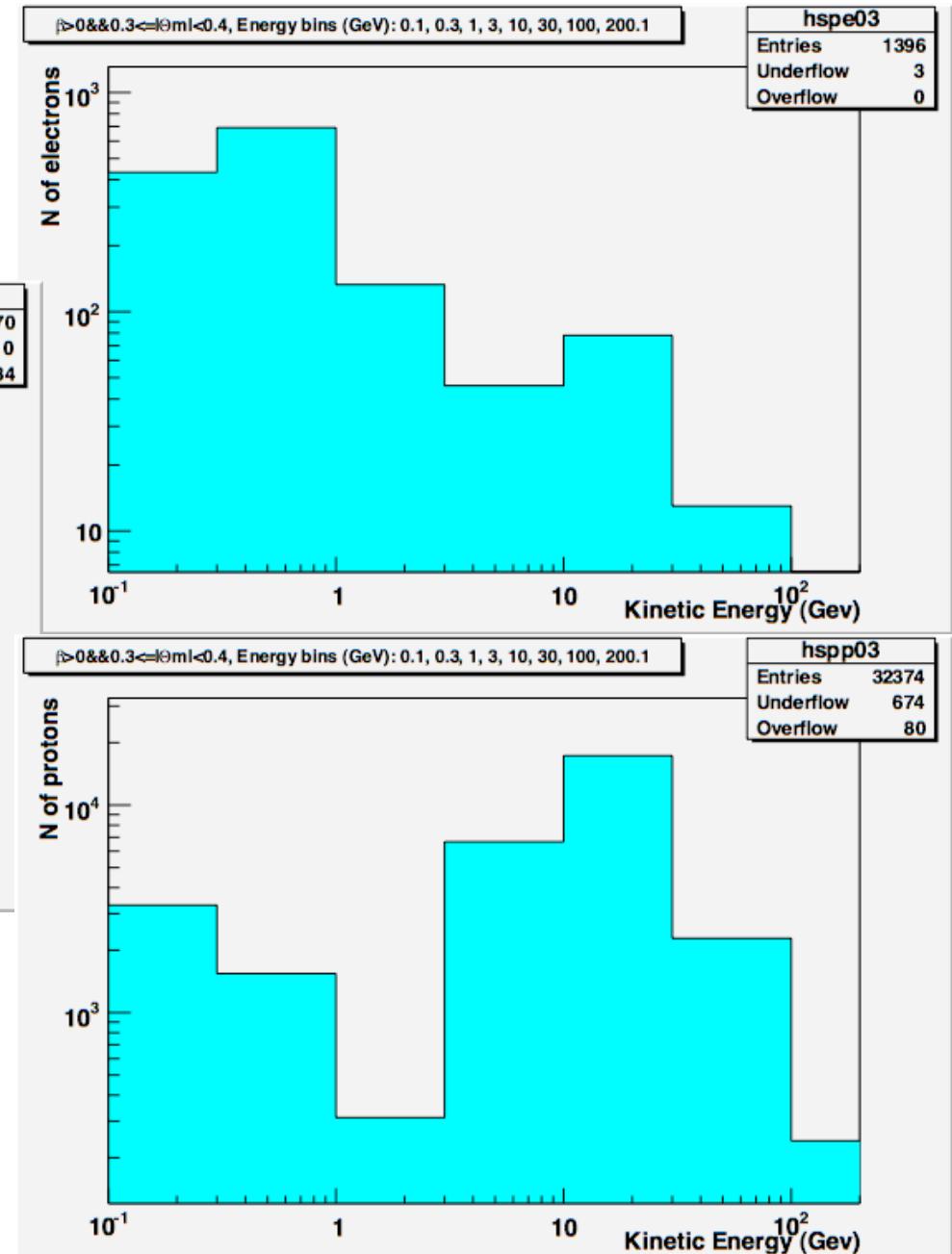
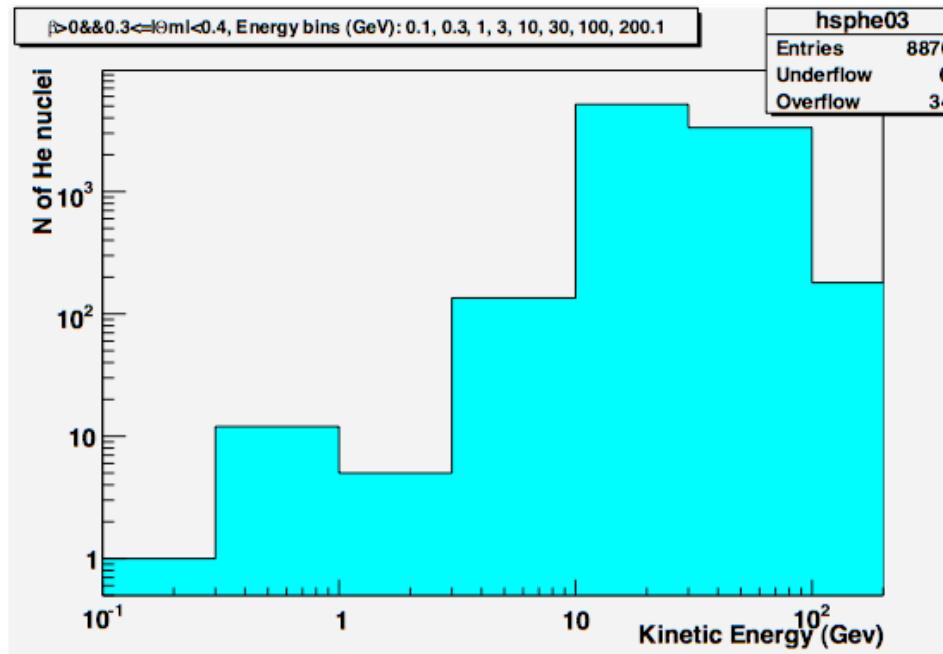
$|\theta_m| < 0.2$



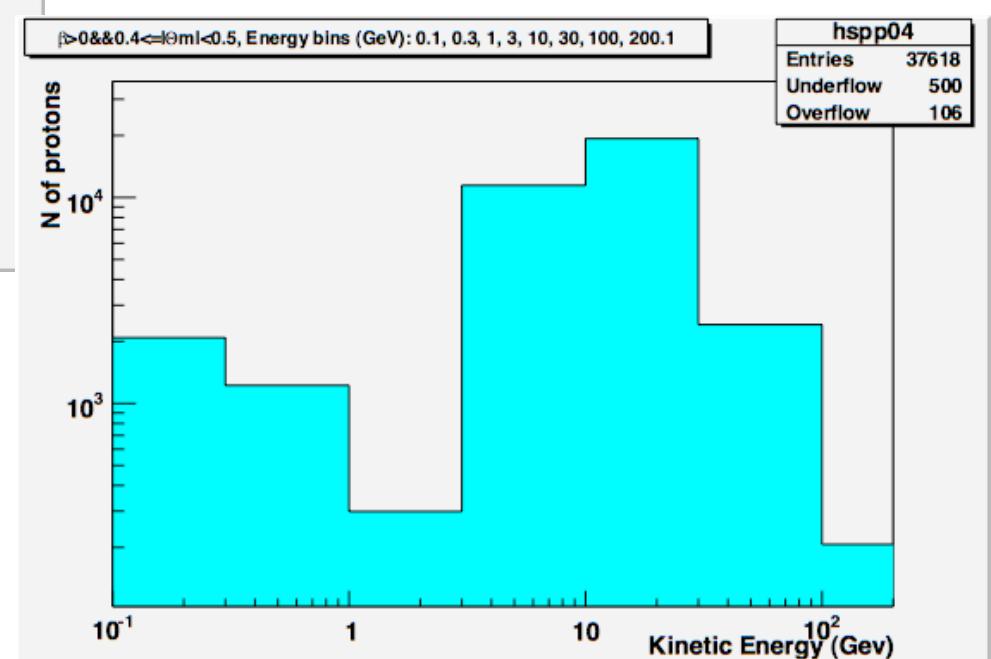
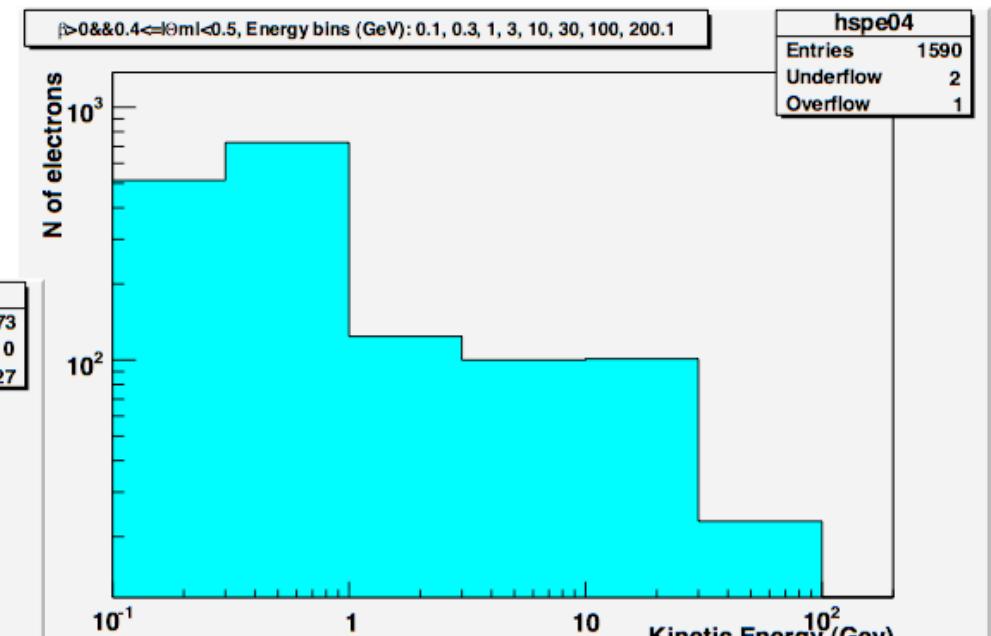
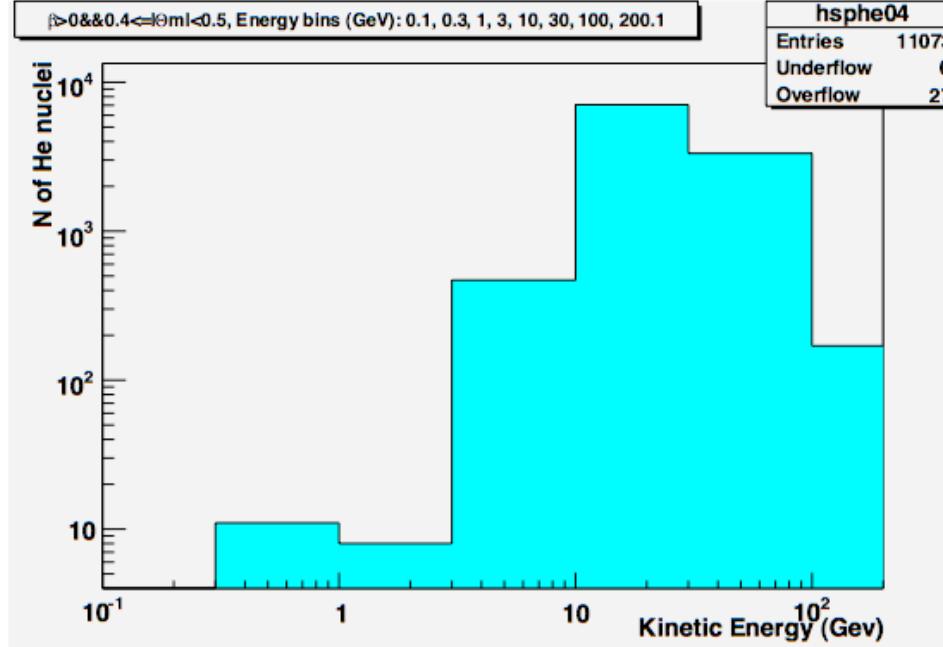
$0.2 \leq |\theta_m| < 0.3$



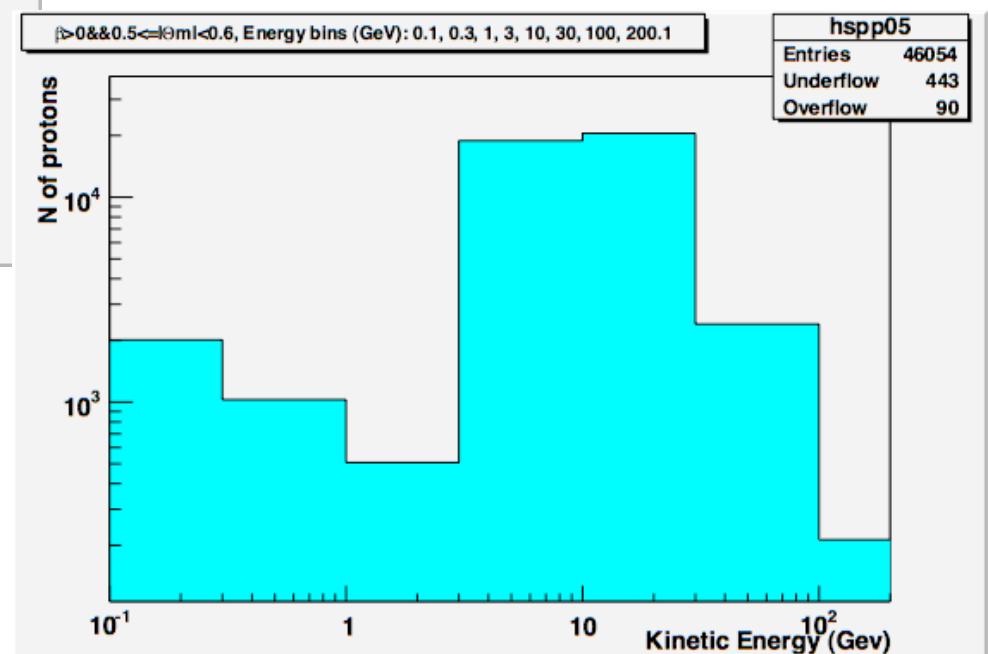
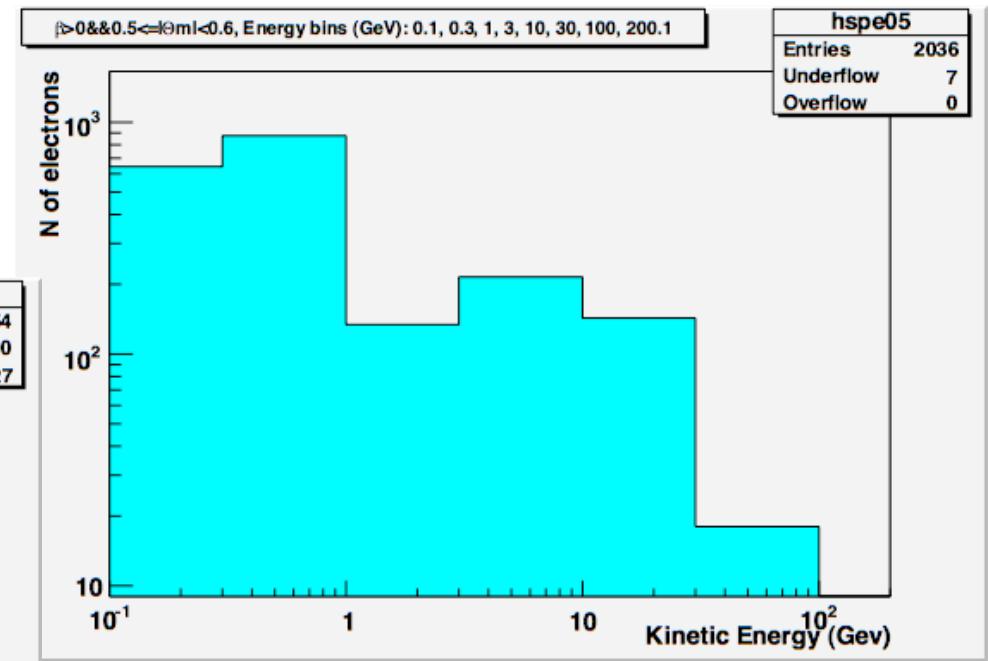
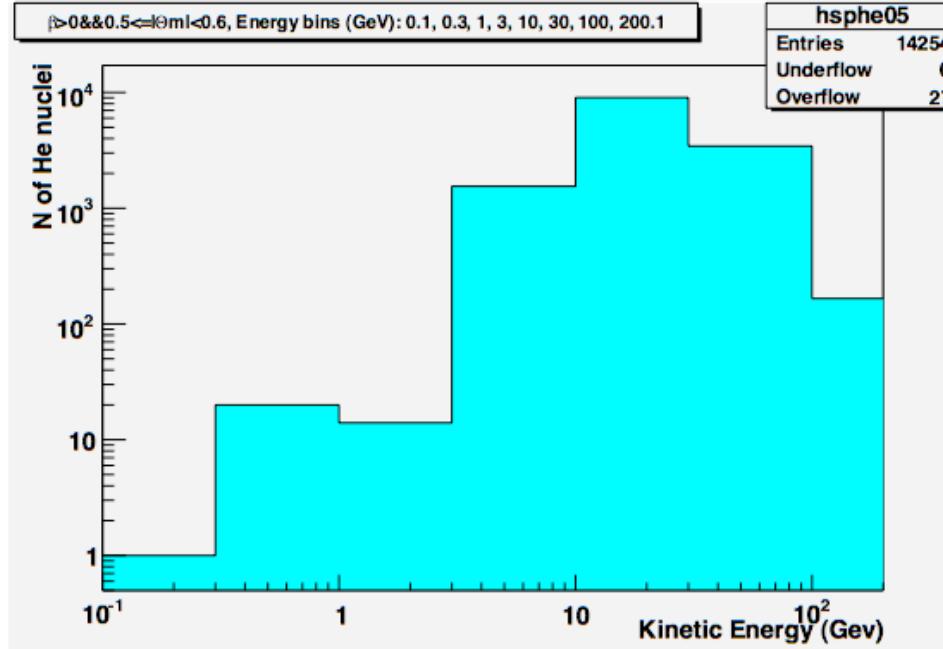
$0.3 \leq |\theta_m| < 0.4$



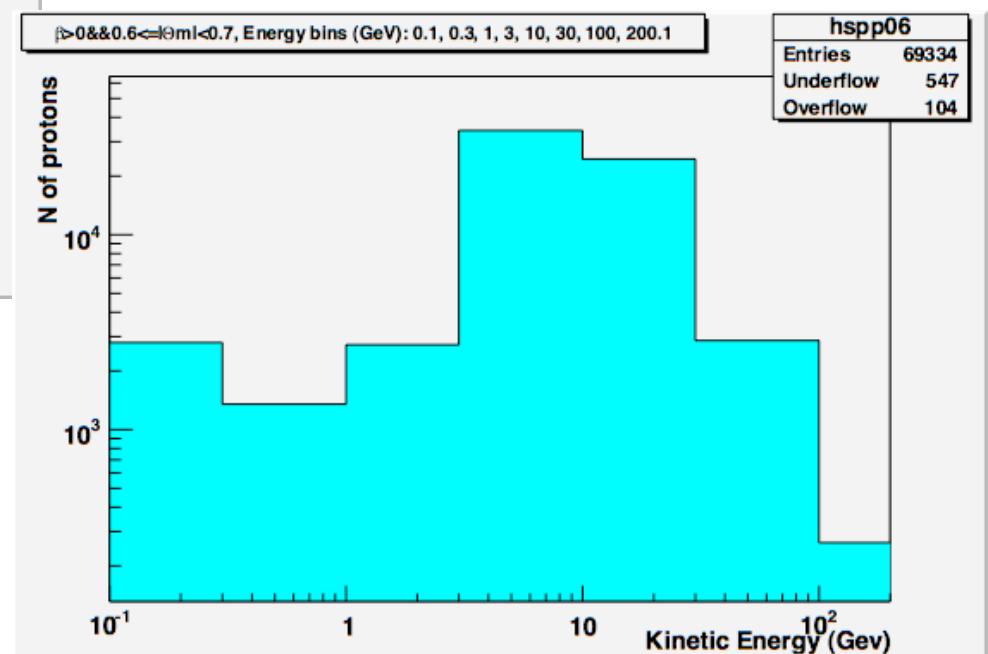
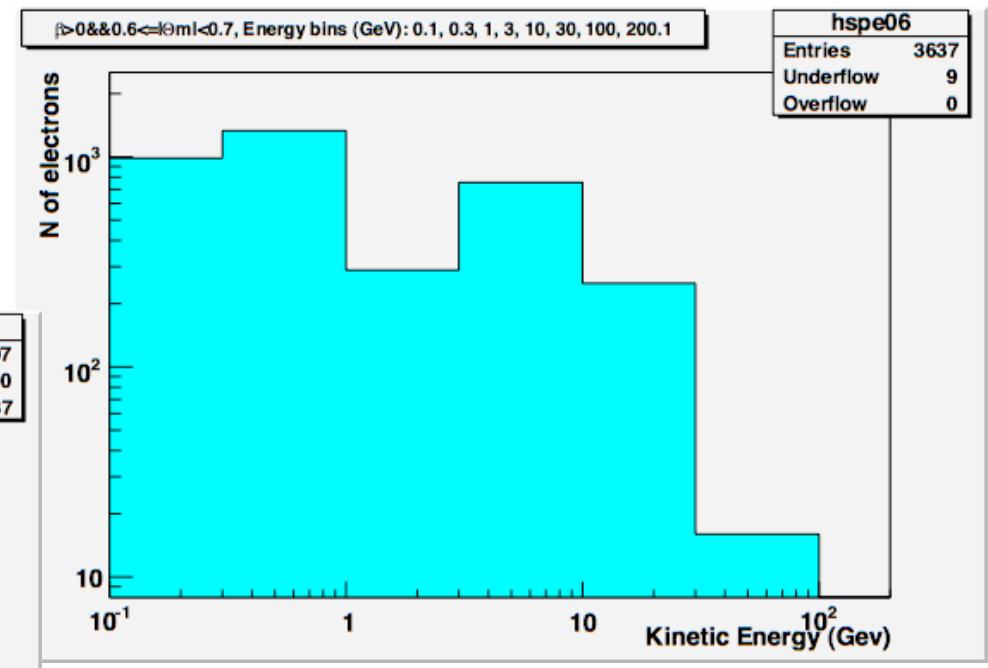
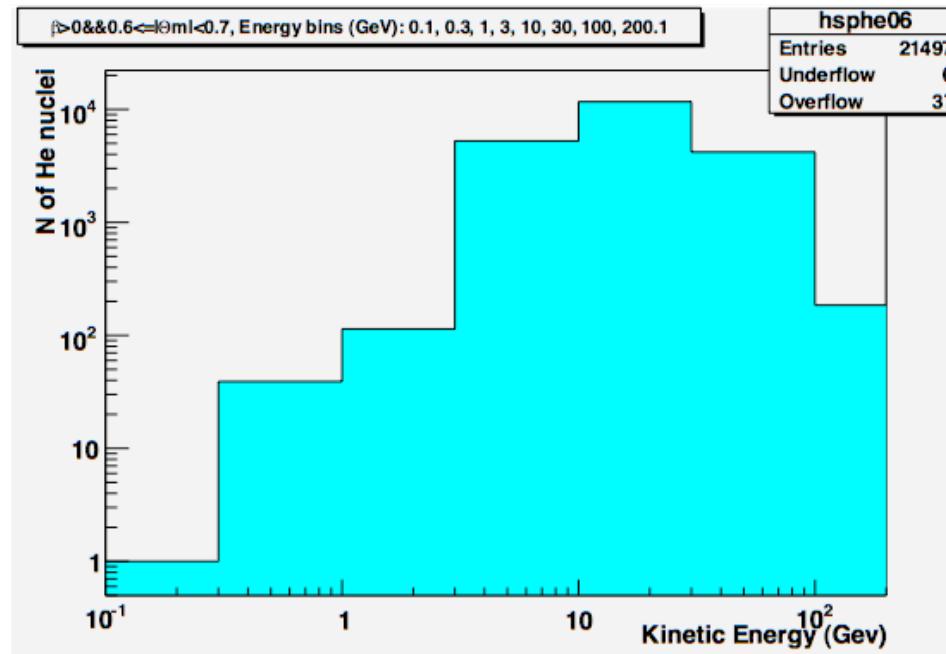
$0.4 \leq |\theta_m| < 0.5$



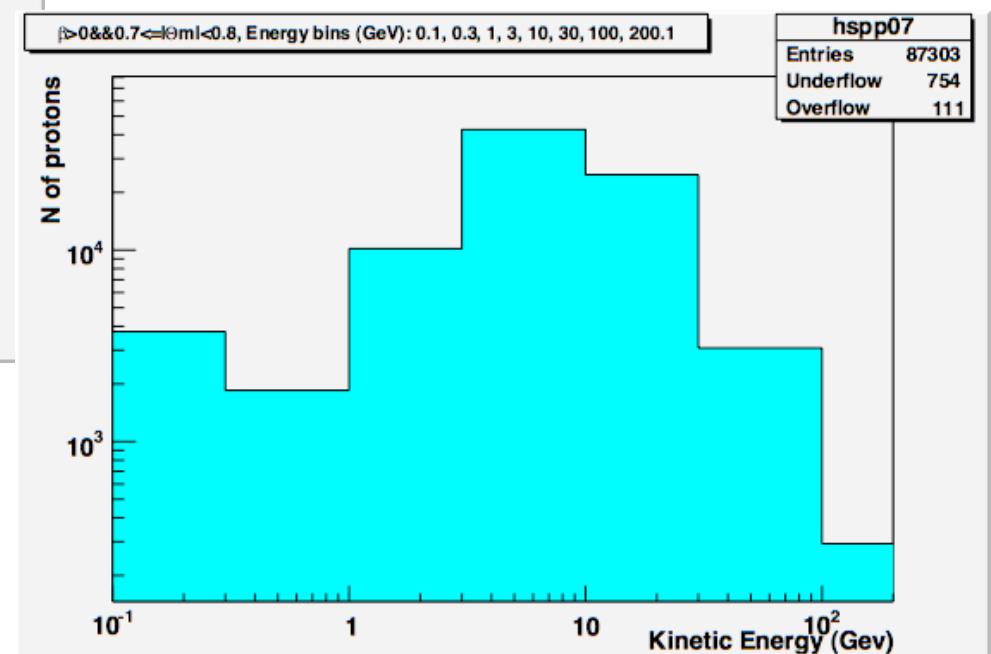
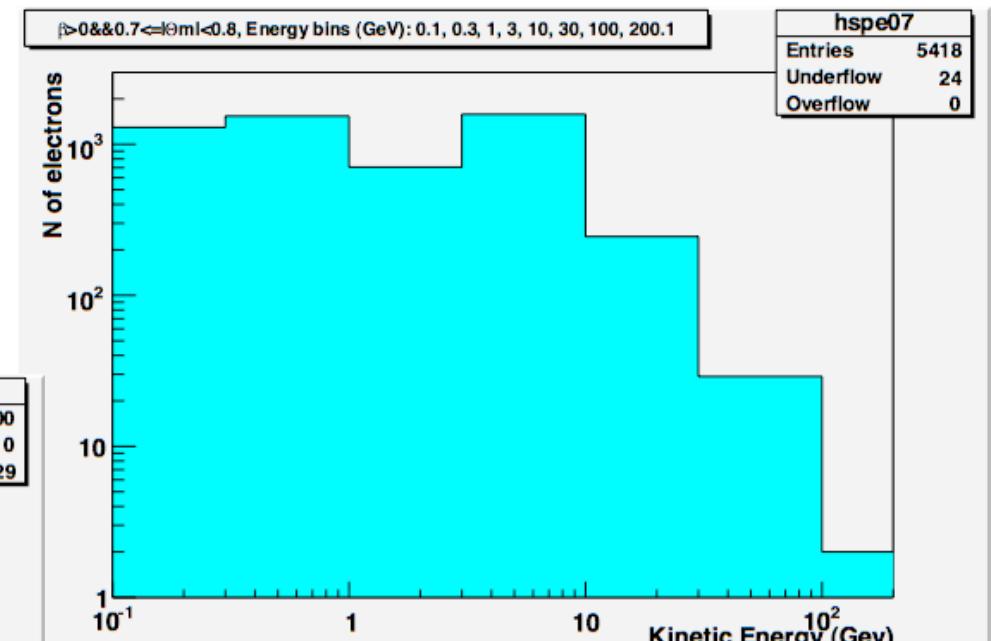
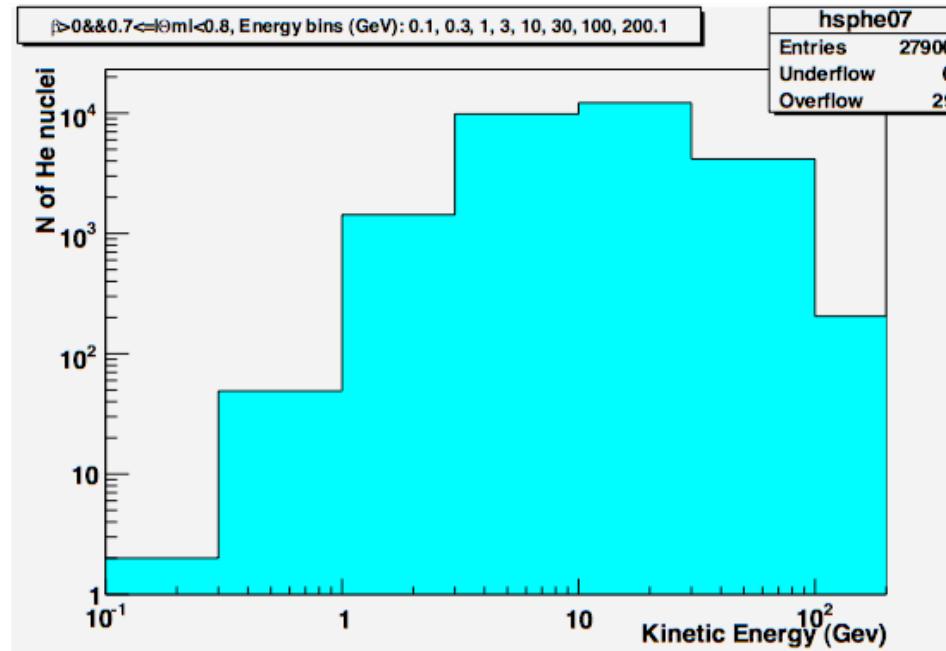
$0.5 \leq |\theta_m| < 0.6$



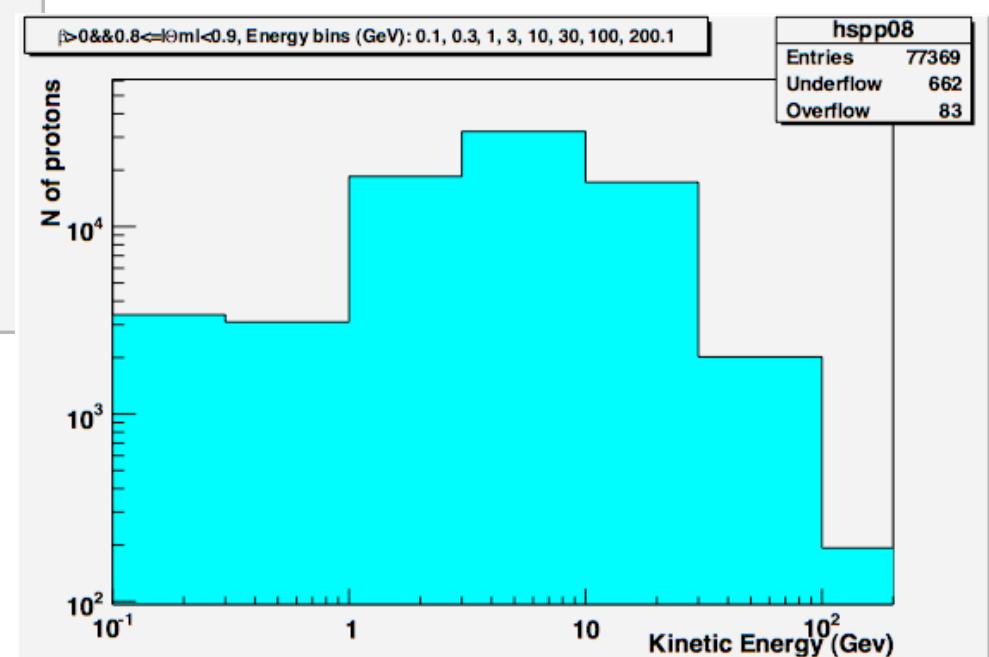
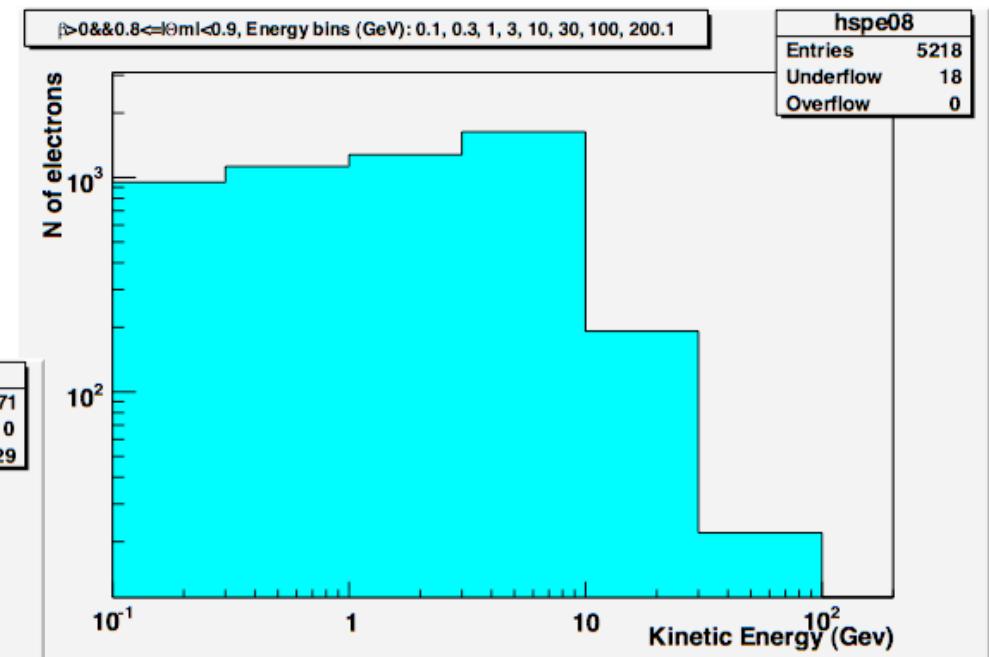
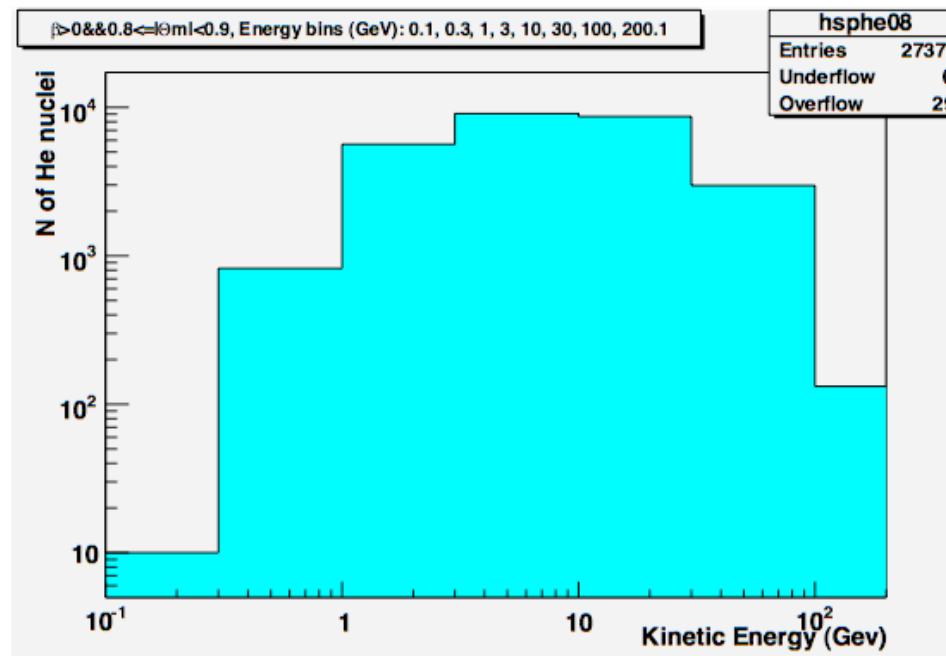
$0.6 \leq |\theta_m| < 0.7$



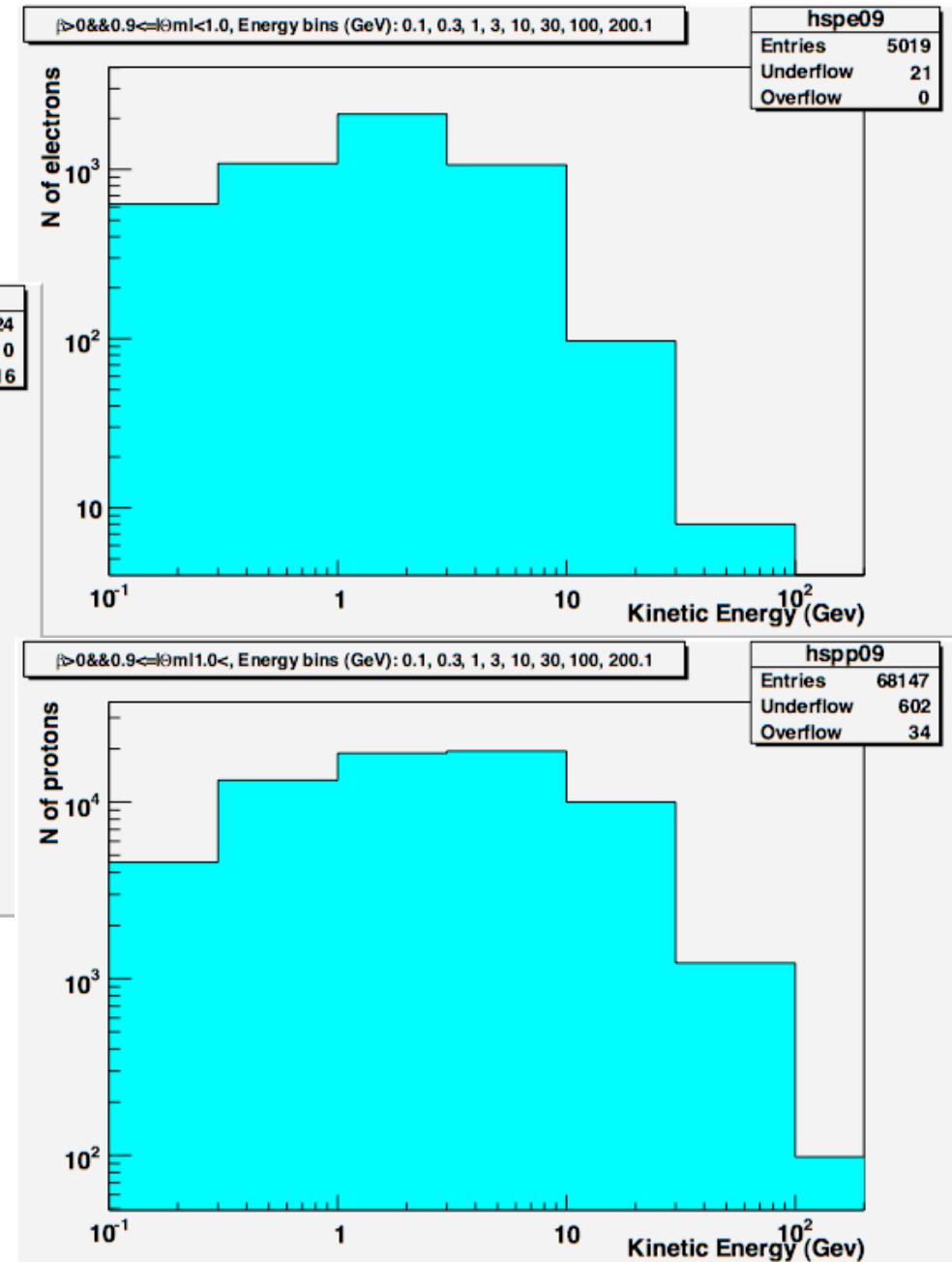
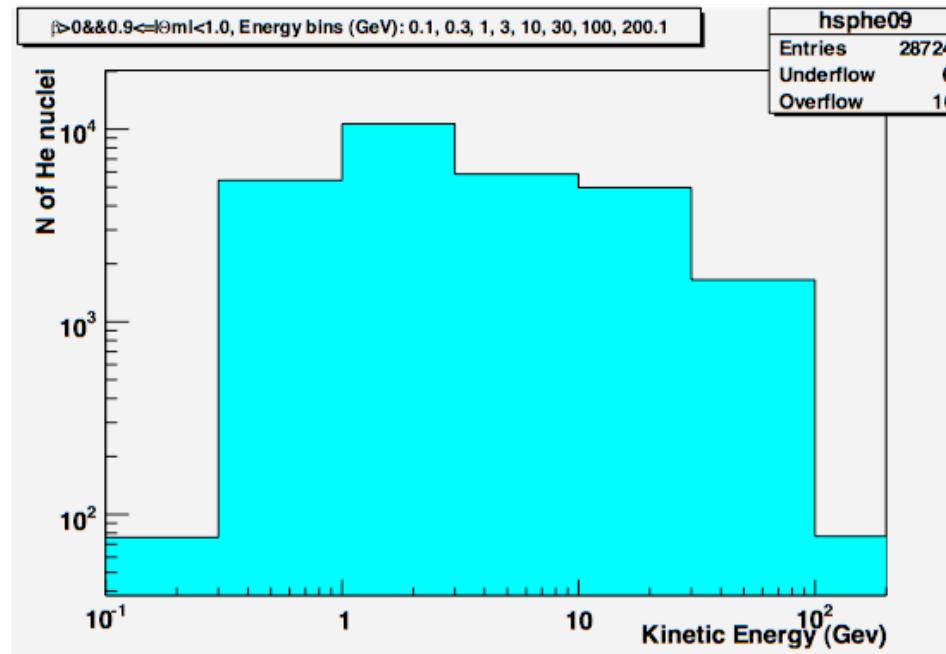
$0.7 \leq |\theta_m| < 0.8$



$0.8 \leq |\theta_m| < 0.9$



$0.9 \leq |\theta_m| < 1.0$



$|\theta_m| \geq 1.0$

