

MUSUN SIMULATION FOR STAWELL

**MUON DISTRIBUTION AROUND
SIMULATED BOX**

SIM BOX AROUND LAB

- ▶ 40 x 20 x 22 m³ in x, y and z
- ▶ 1 mil events

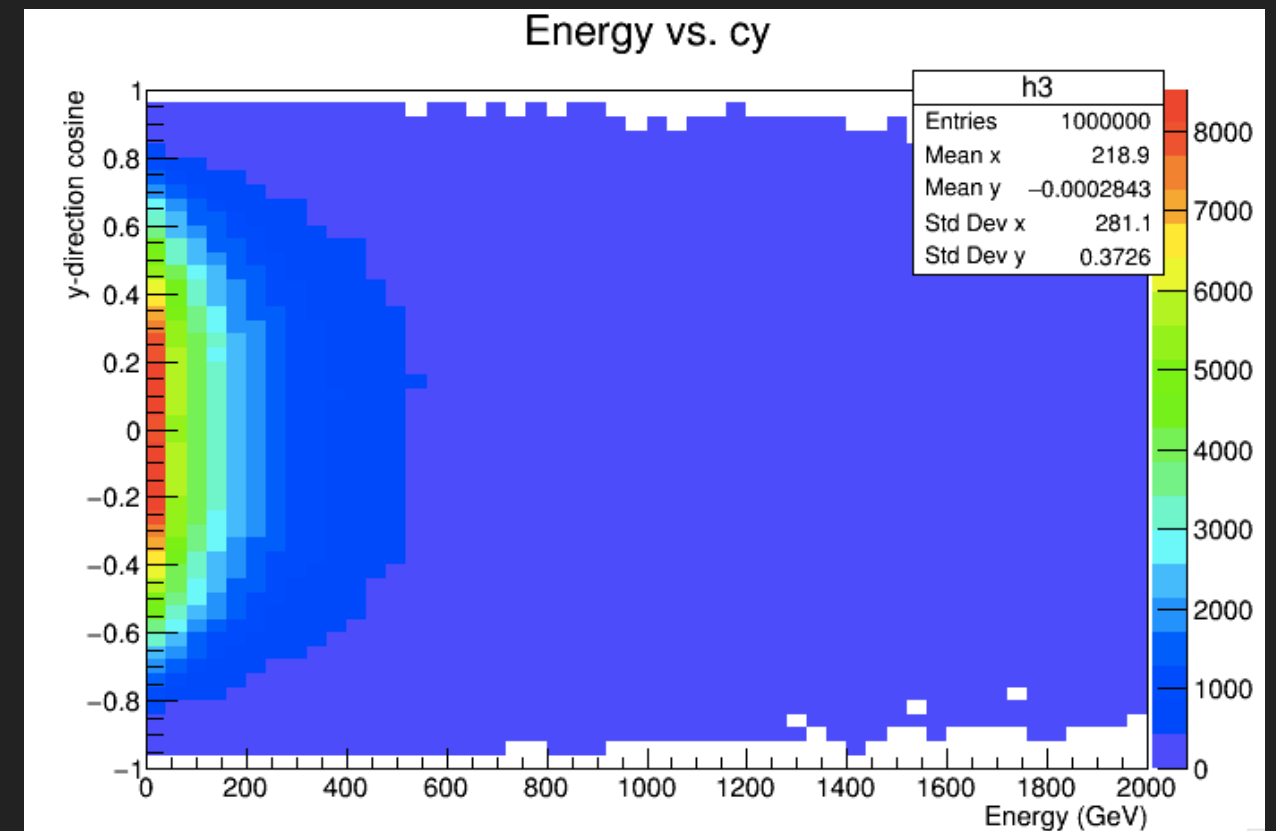
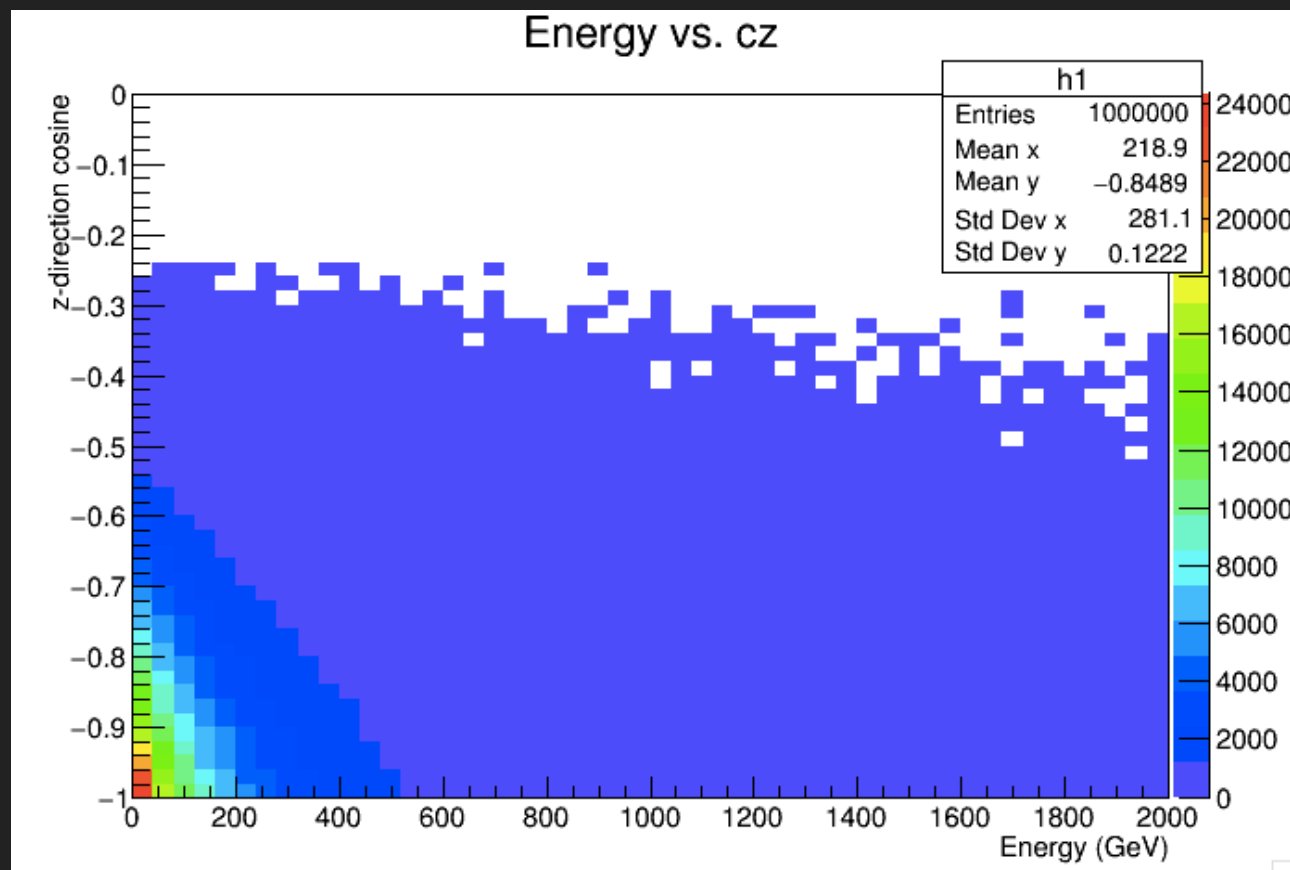
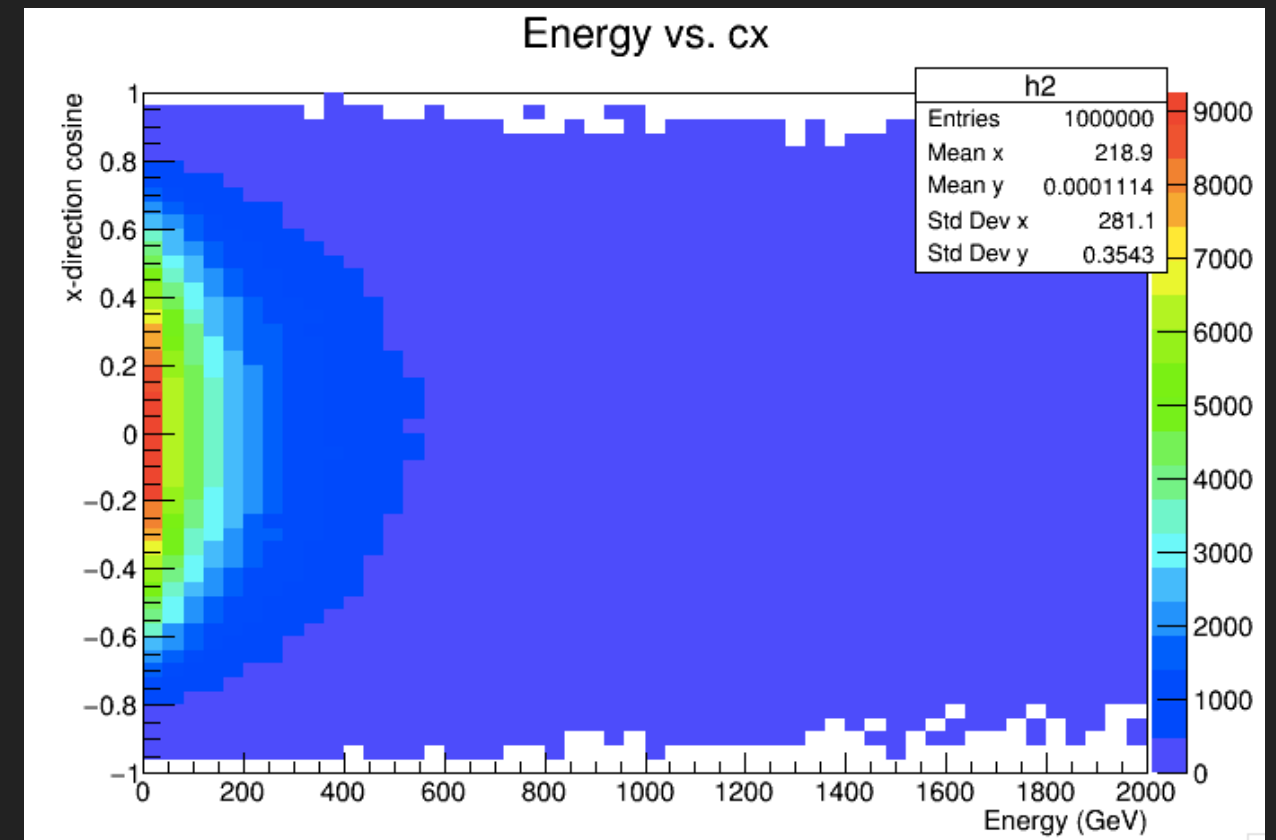
Muon energy vs. momentum directional cosines

50 Bins/axis

$$cz = -\cos(\theta)$$

$$cx = -\sin(\theta) \cdot \cos(\phi)$$

$$cy = -\sin(\theta) \cdot \sin(\phi)$$



Energy profiles on each plane

20 Bins/axis

