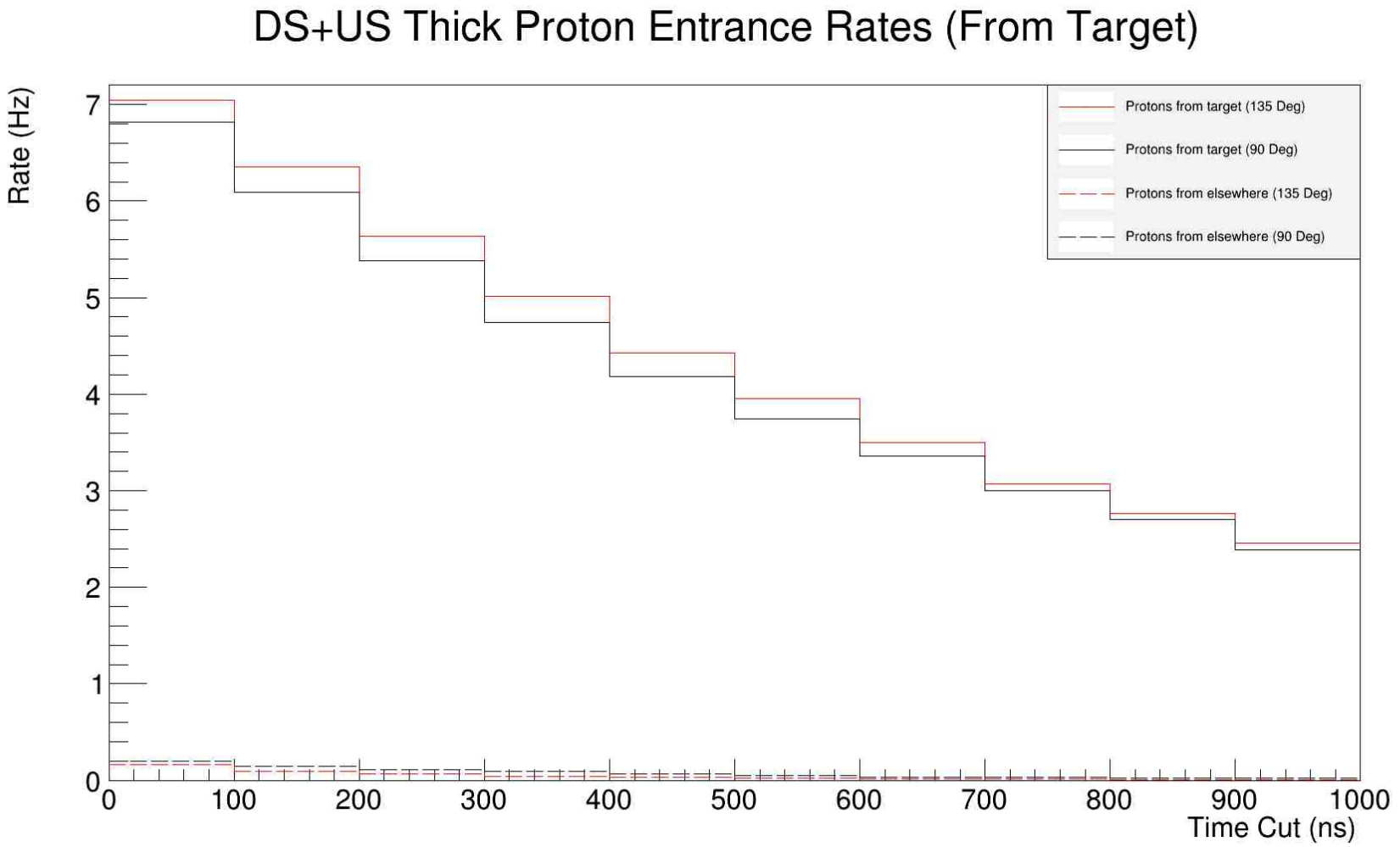
90 Deg vs. 135 Deg

Number of Muons Scattered Into Downstream

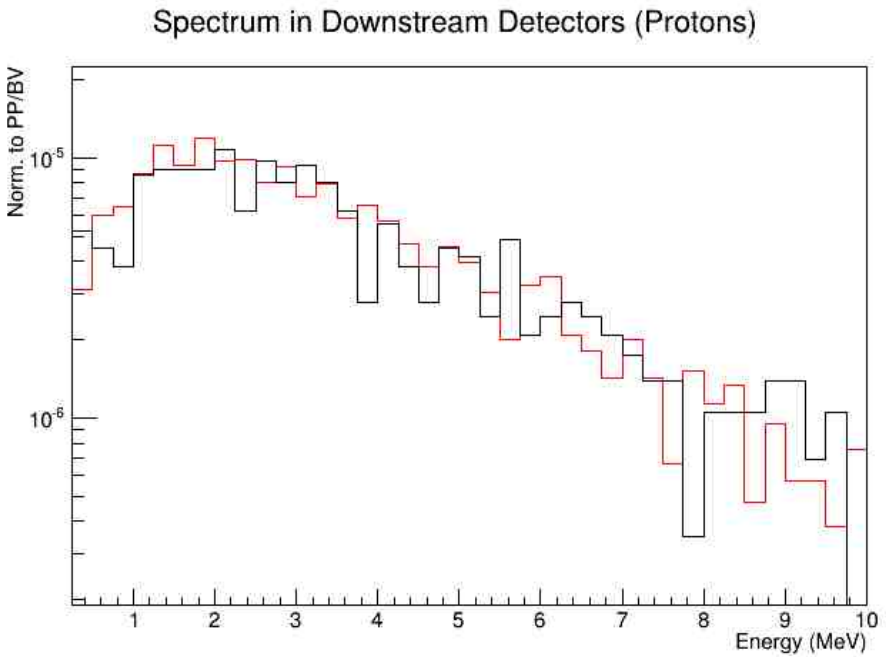
Angle	Normalized to Pileup Protection and Beam Vetos	Normalized to Primary Stops in Target
135 deg	86.9571E-5	56.2194E-3
90 deg	3.7938E-5	02.4545E-3

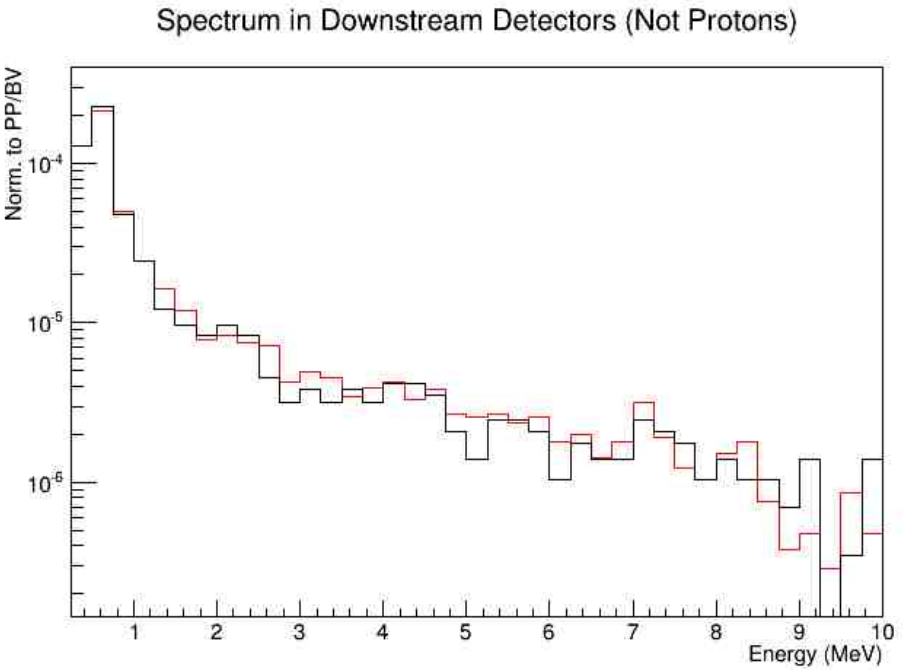
Proton Rates



Energies

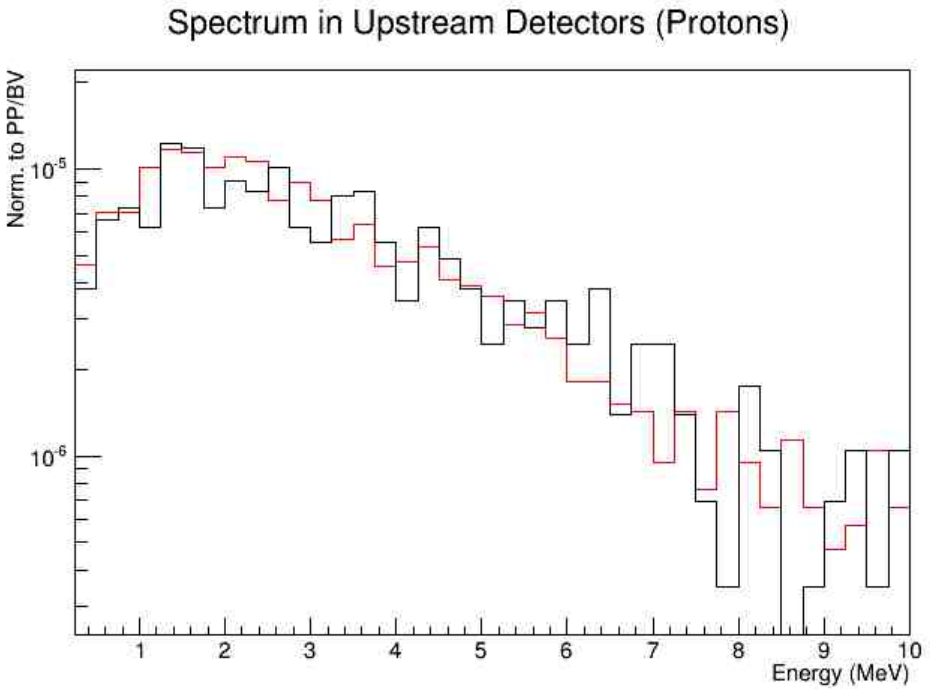
135 Deg
90 Deg

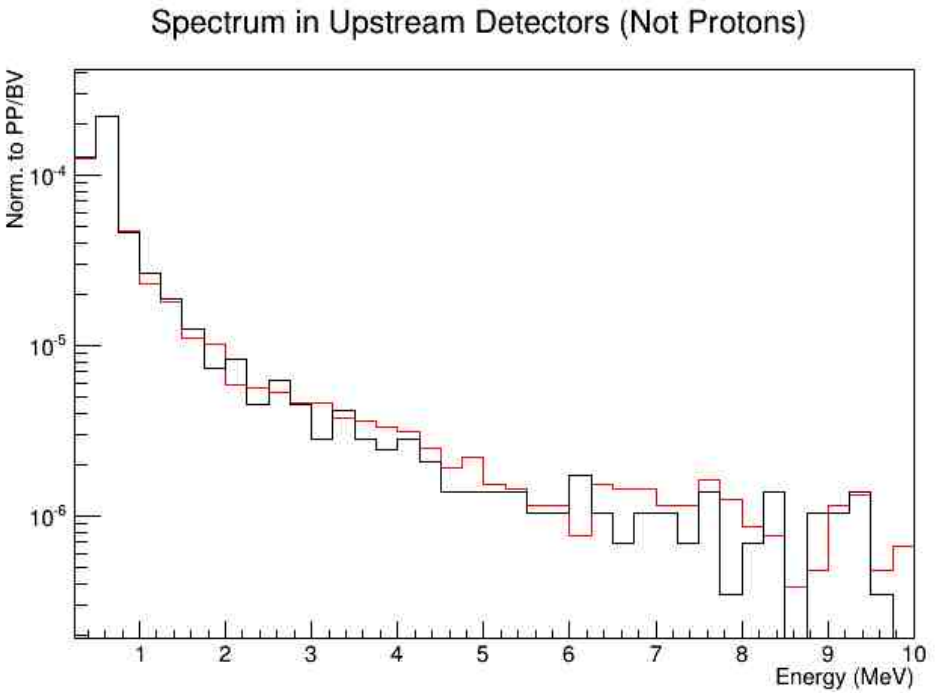




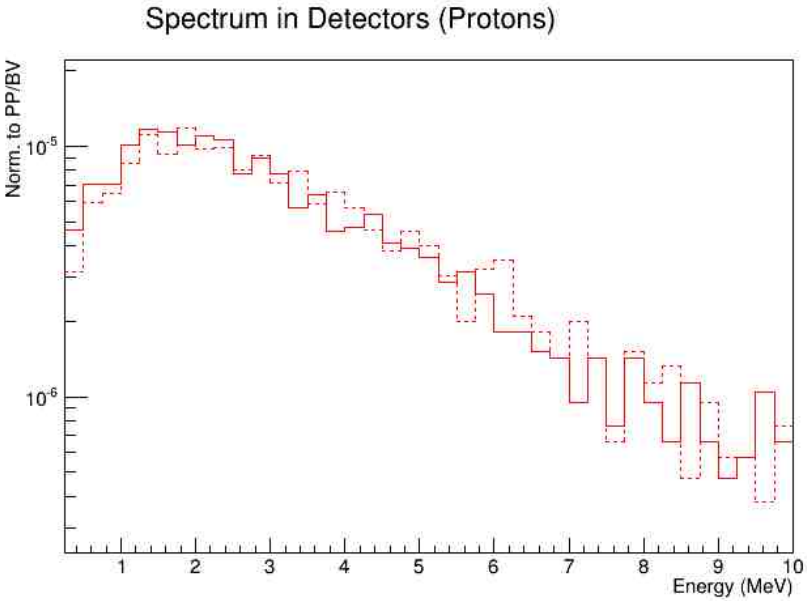
Energies

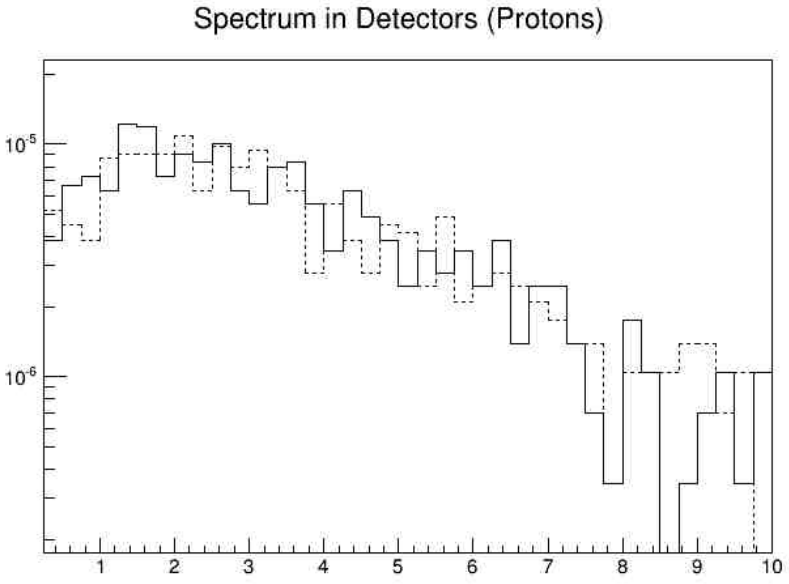
135 Deg
90 Deg





US/DS

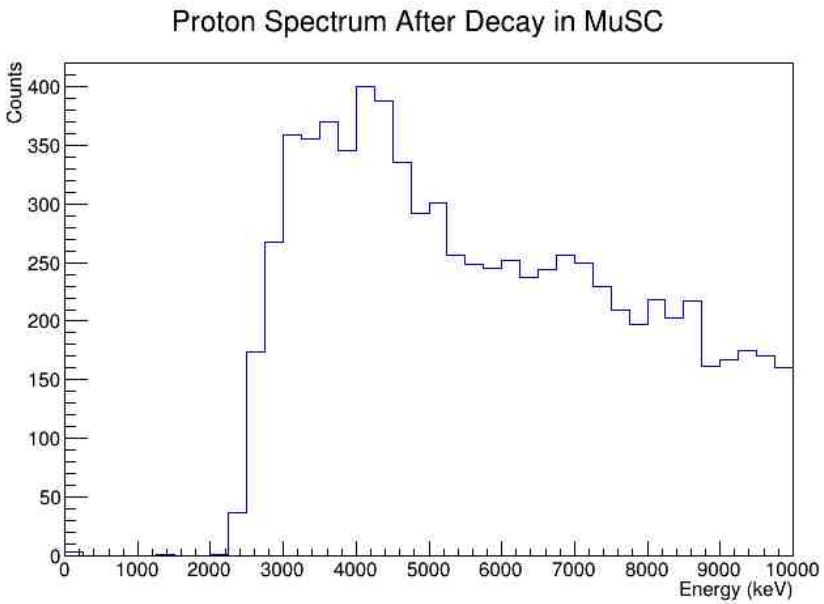




Upstream (Beam Right): Solid Line
Downstream (Beam Left): Dotted Line

MuSc inside chamber?

- ~25% as many muons stop in MuSC as in Target (for beam momentum maximizing stops in thin target)



- If valid event := !(muSCA | muVeto | ScL | ScR) & muSc
  - 15% primary stops in target per valid event when beam counter outside chamber
  - 75% primary stops in target per valid event when beam counter inside chamber