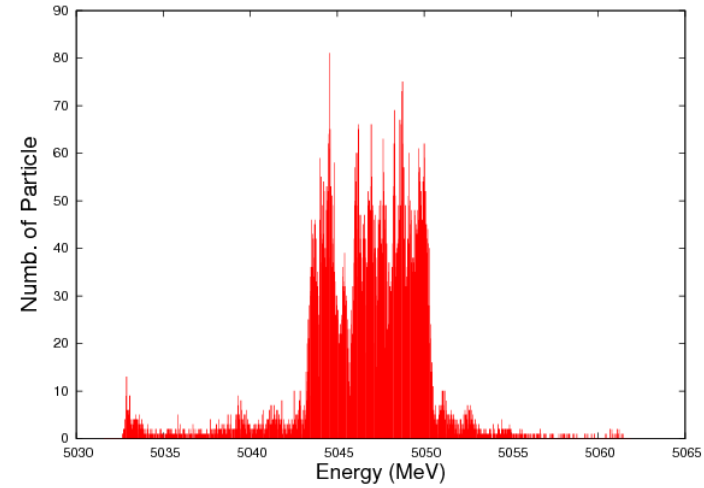
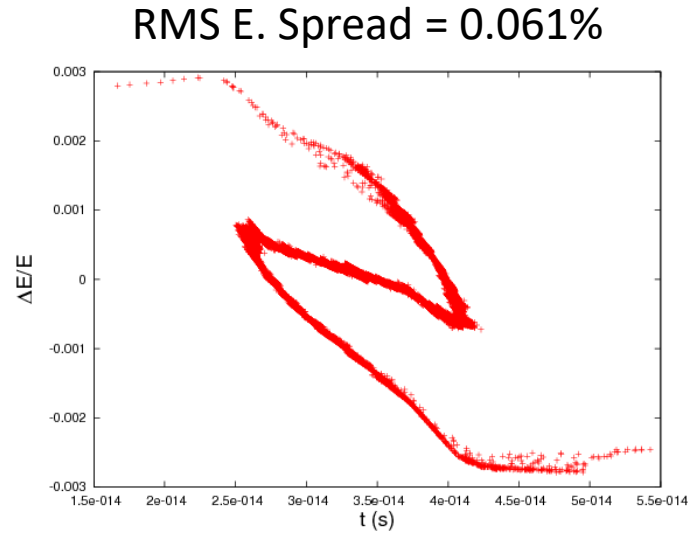
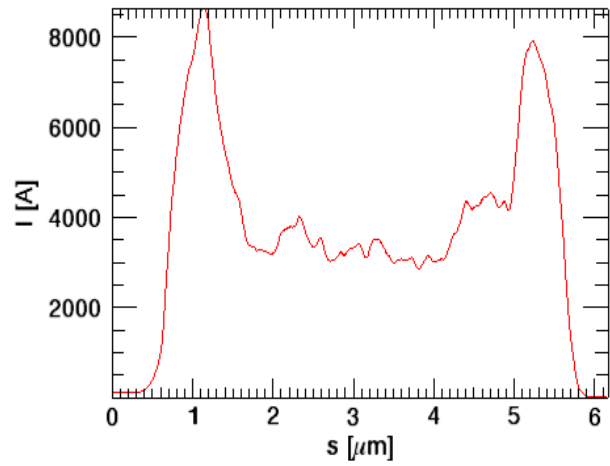
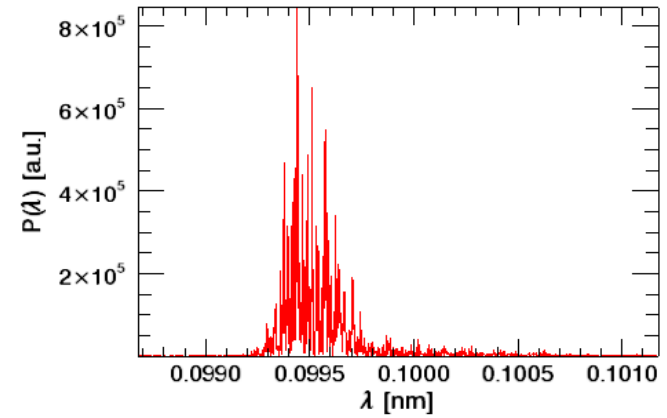
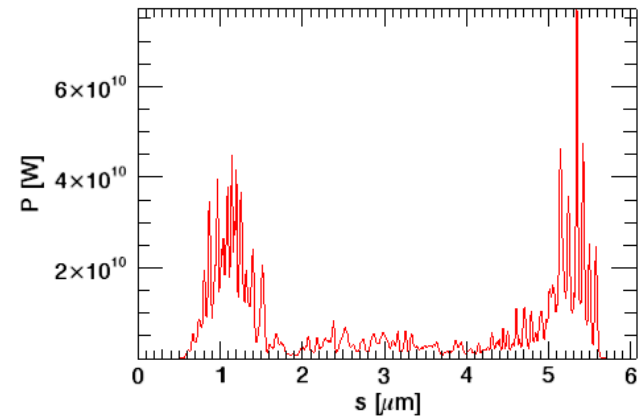
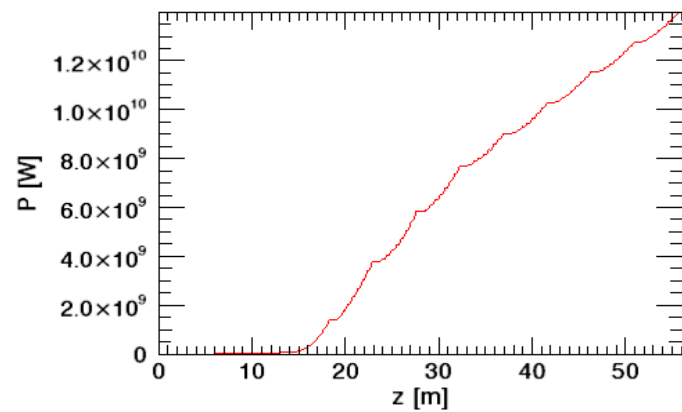


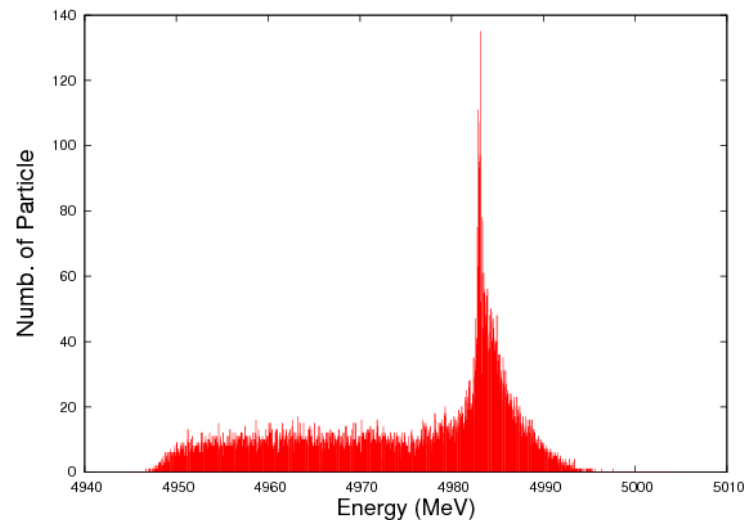
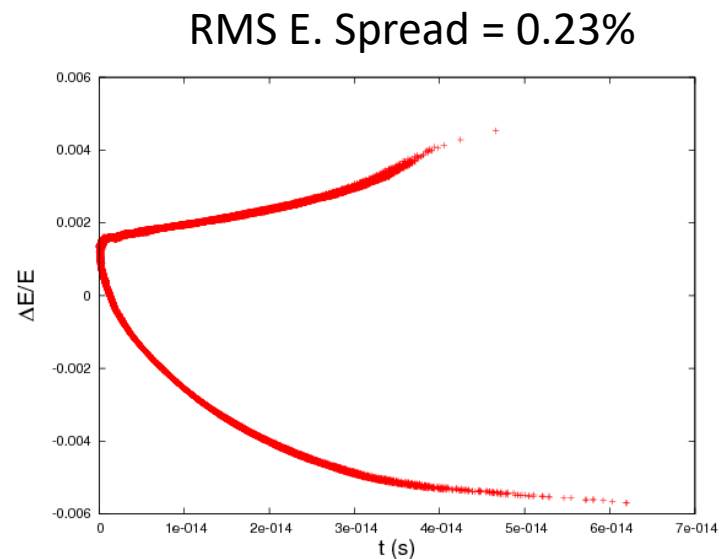
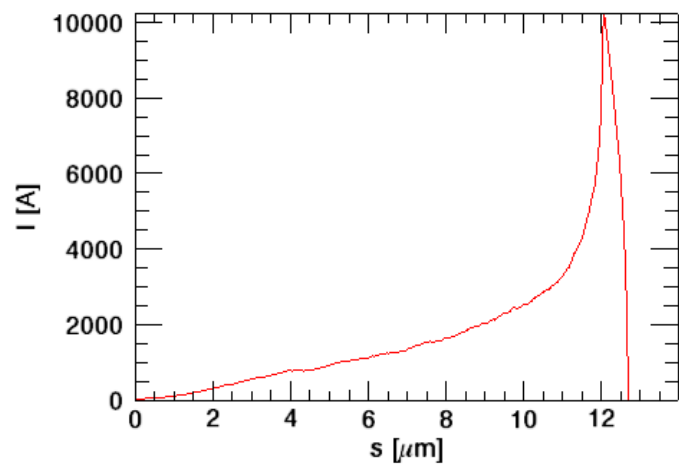
# 1. Beam



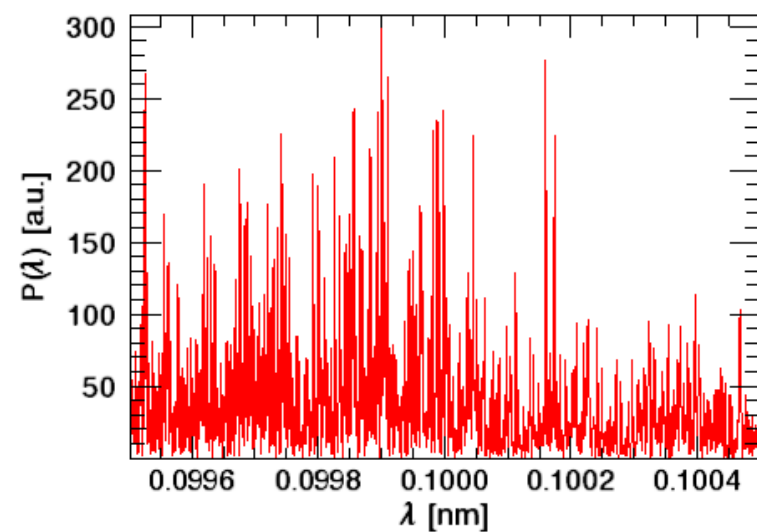
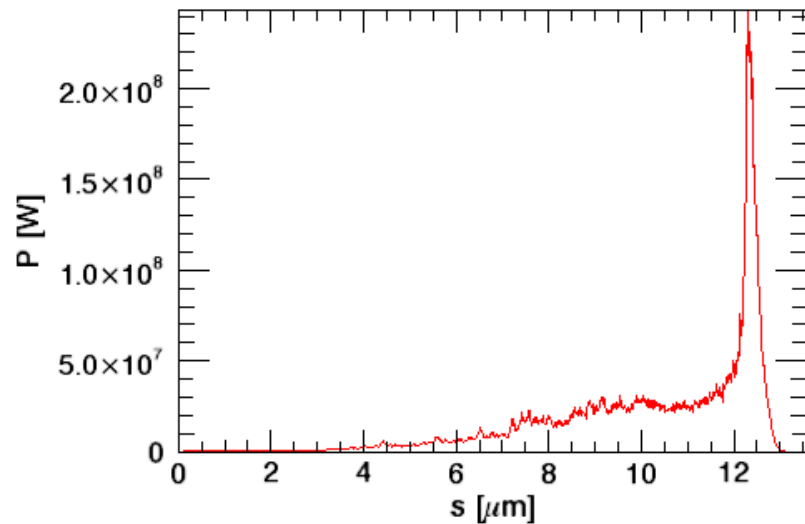
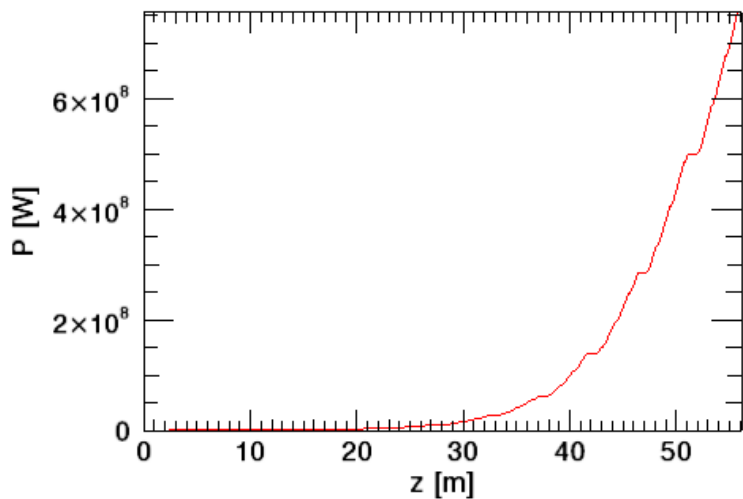
1 A, Profile and spectrum graphics are at saturation  $z=30$  m



## 2. Beam

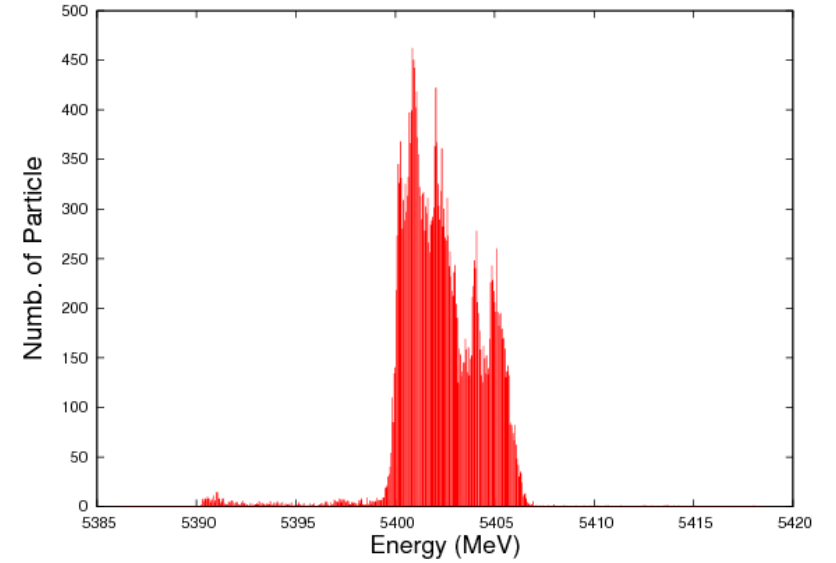
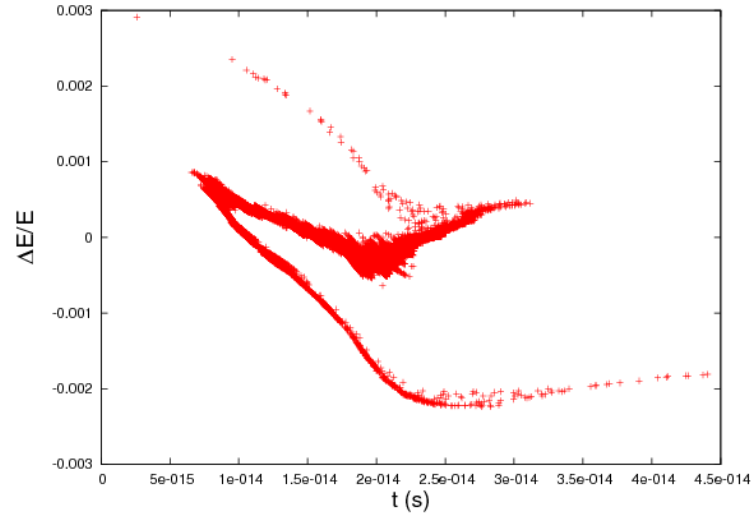
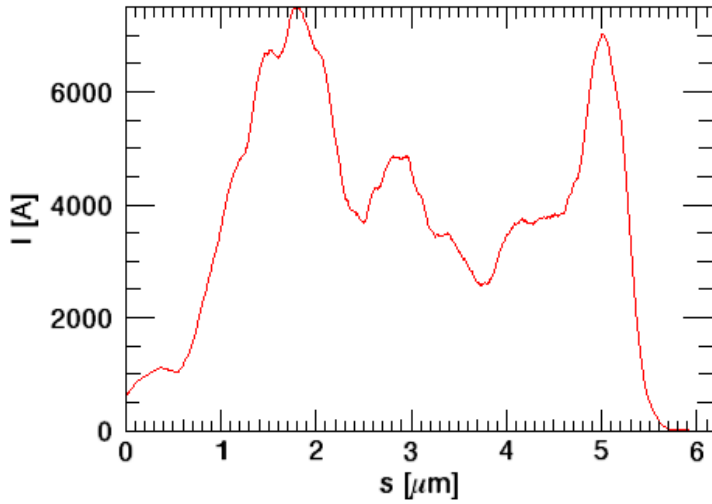


1 A, Profile and spectrum graphics are at  $z=30$  m

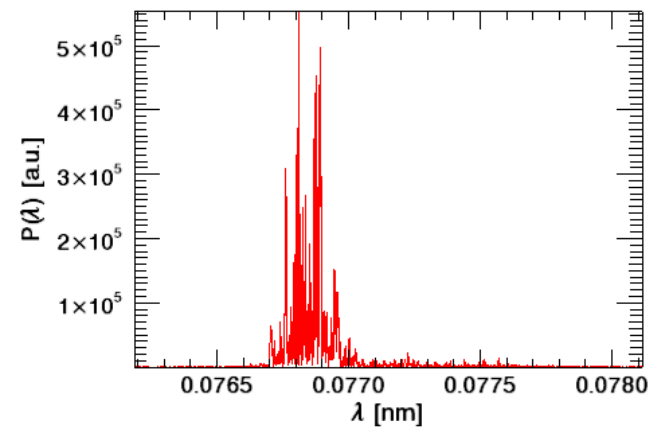
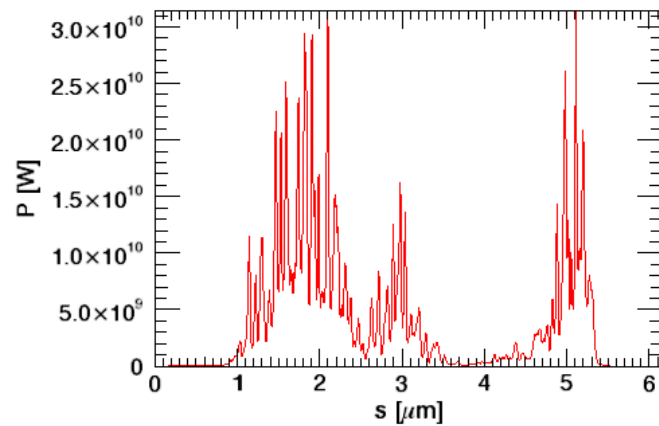
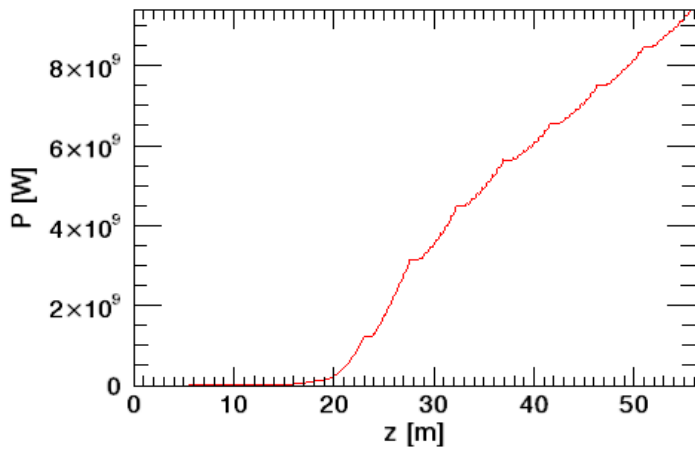


# 3. Beam

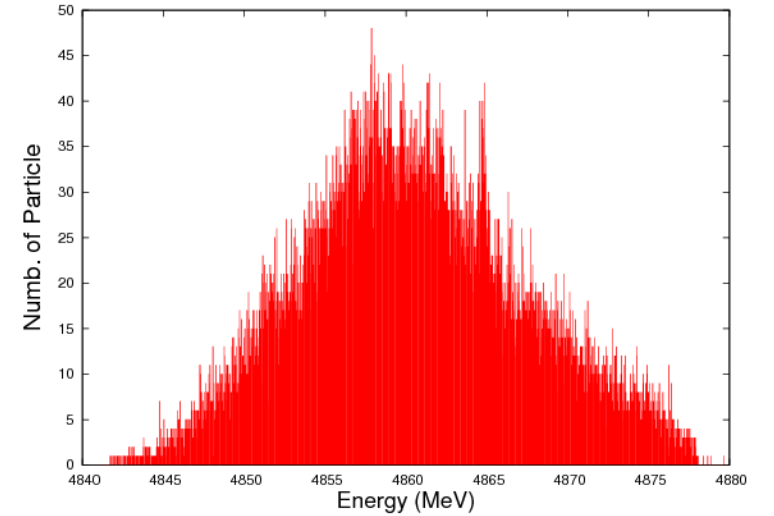
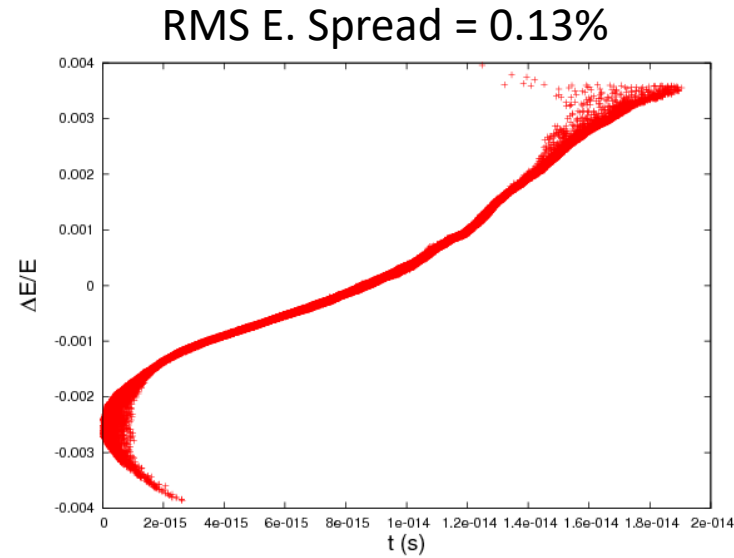
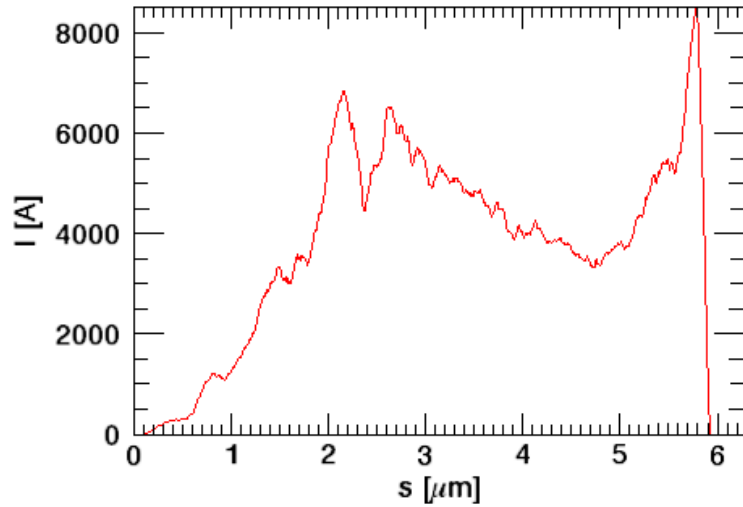
RMS E. Spread = 0.039%



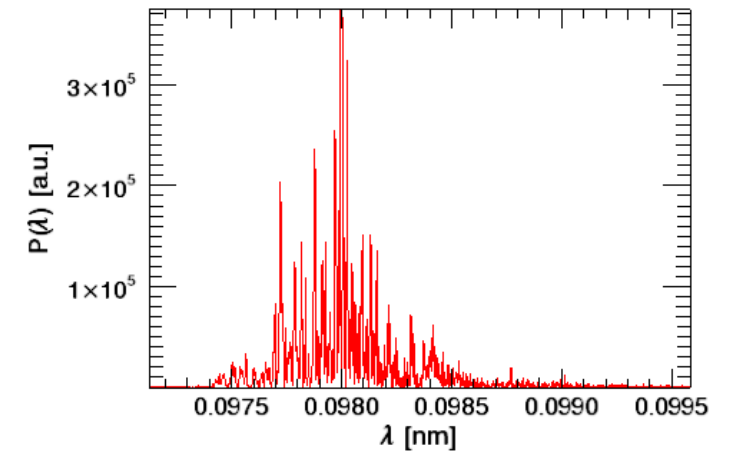
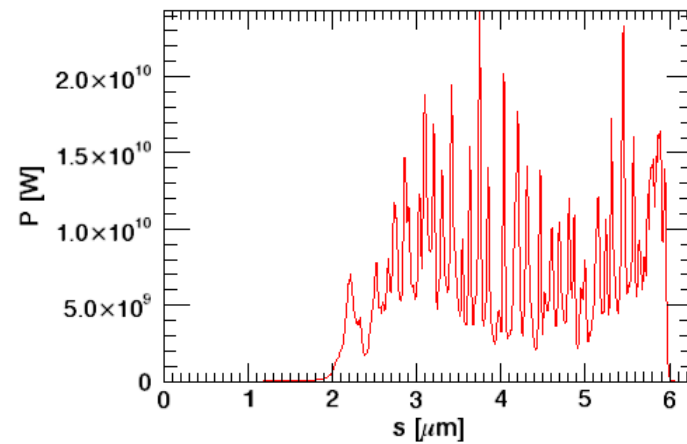
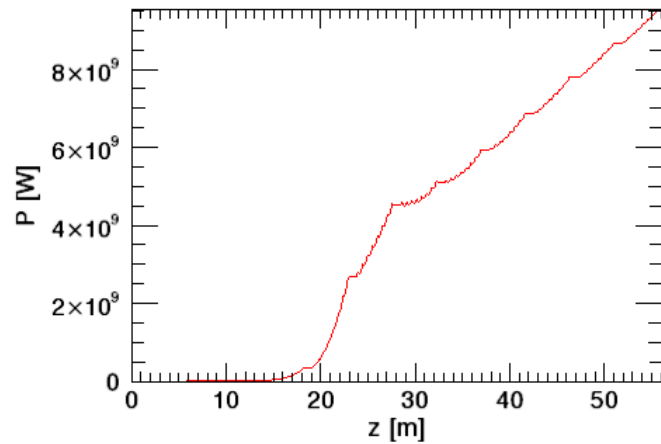
0.76 A, Profile and spectrum graphics are at saturation  $z=30$  m



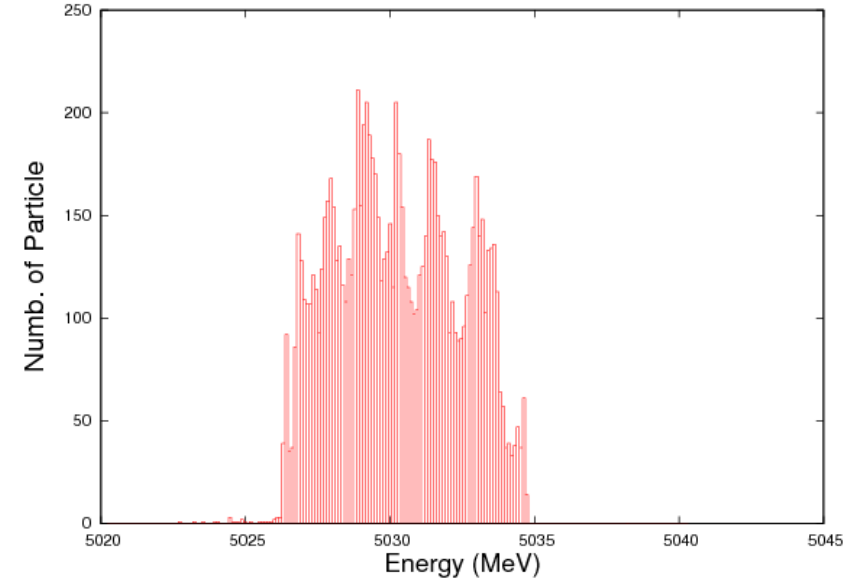
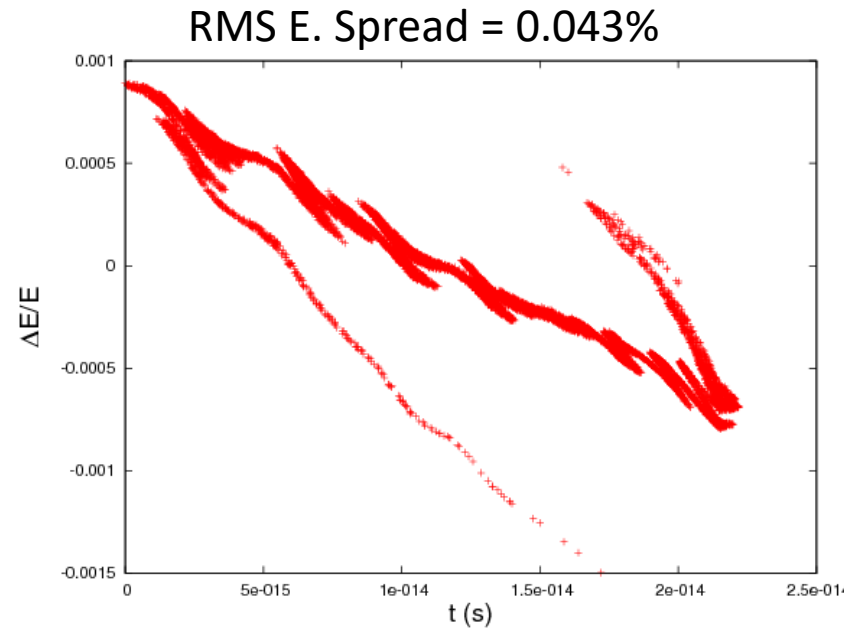
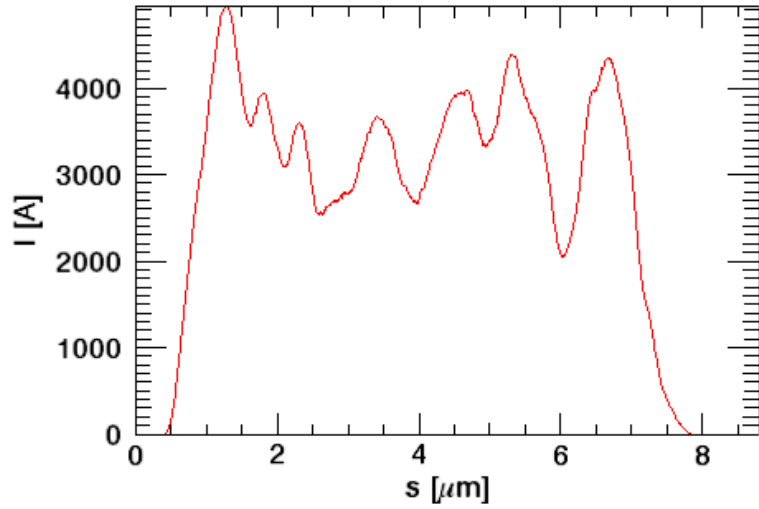
# 4. Beam



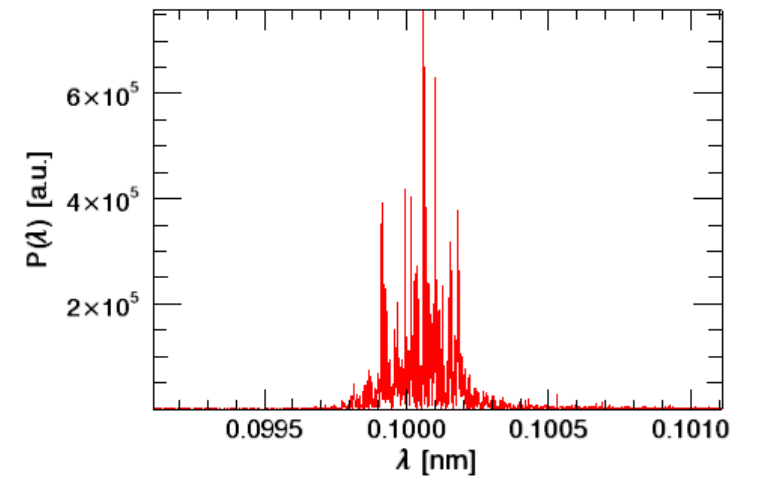
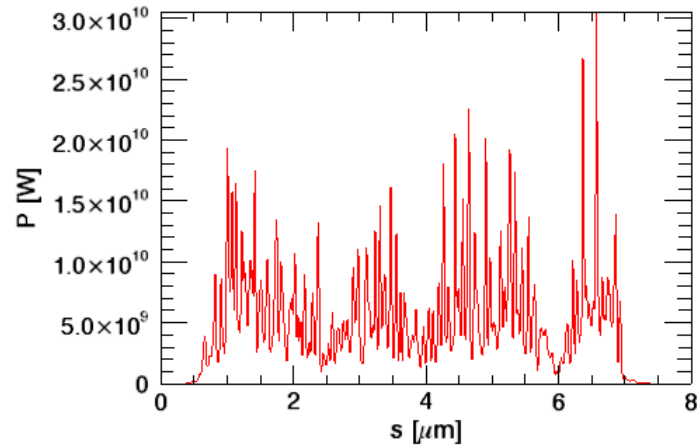
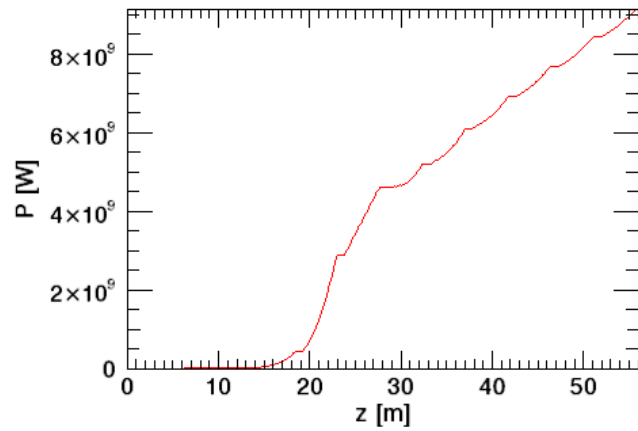
1 A, Profile and spectrum graphics are at saturation  $z=30$  m



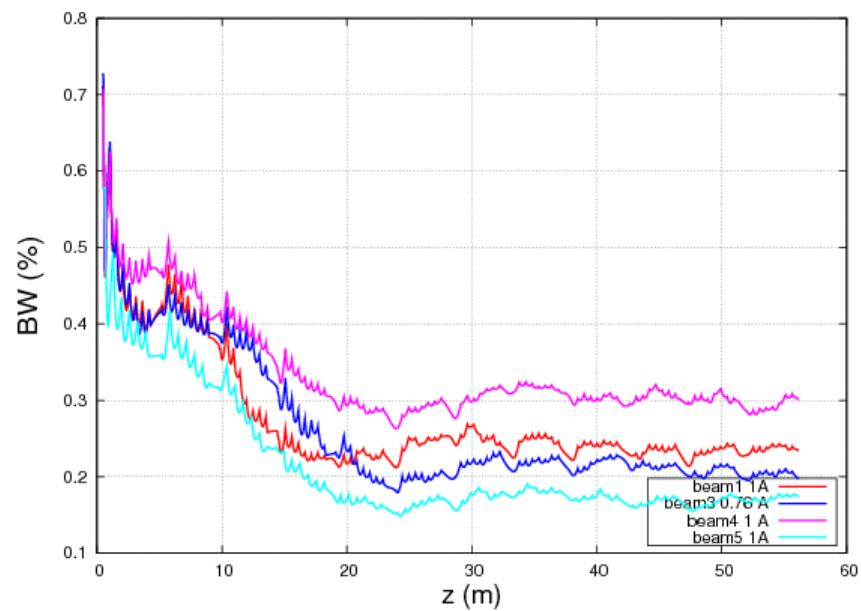
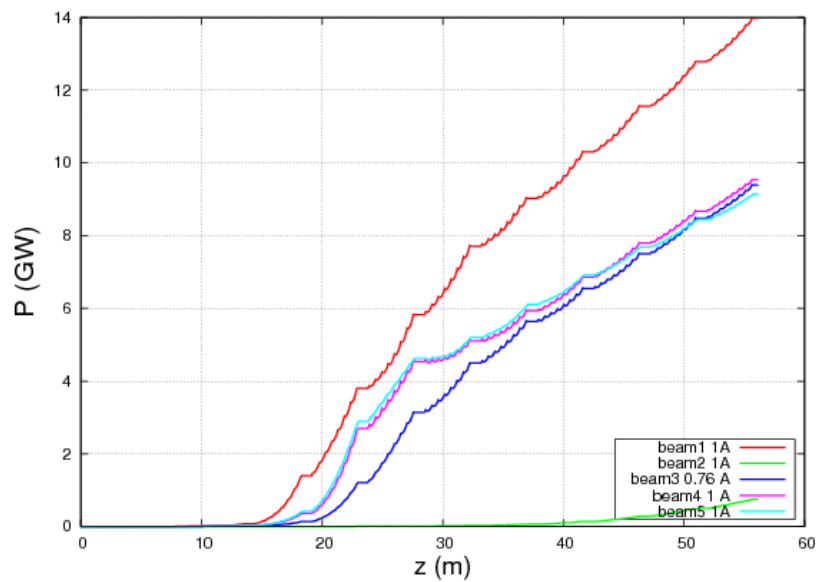
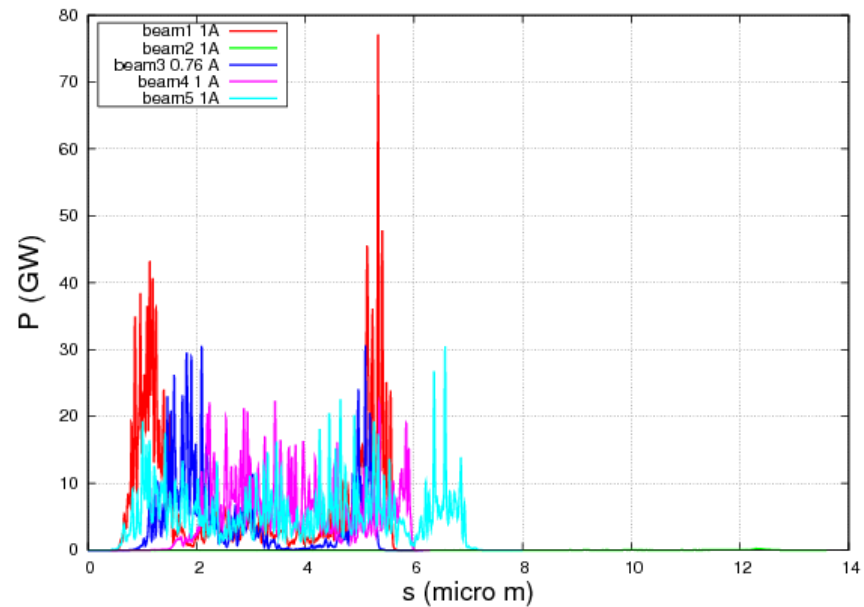
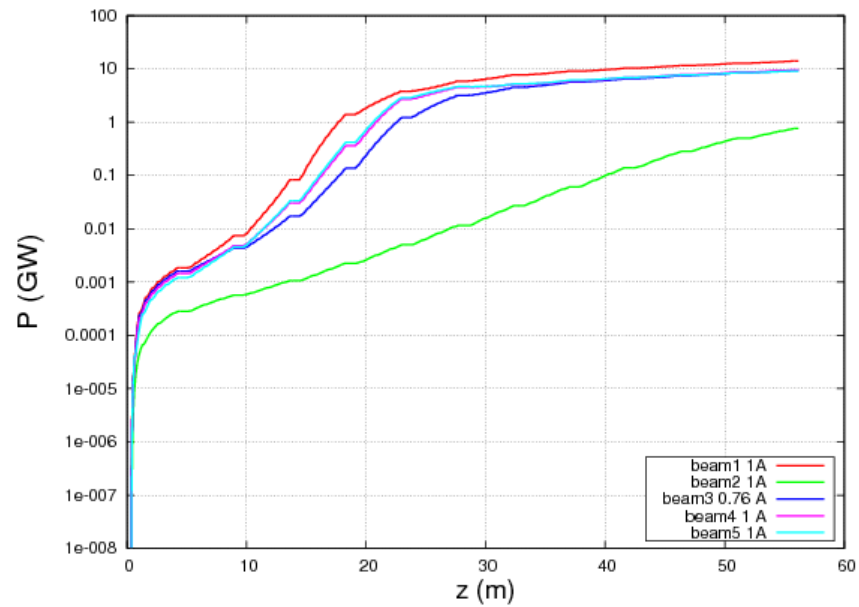
# 5. Beam



1 A, Profile and spectrum graphics are at saturation  $z=30$  m



# Comparision Plots



# From LCLS-II FDR

## We can compare the shape with it.

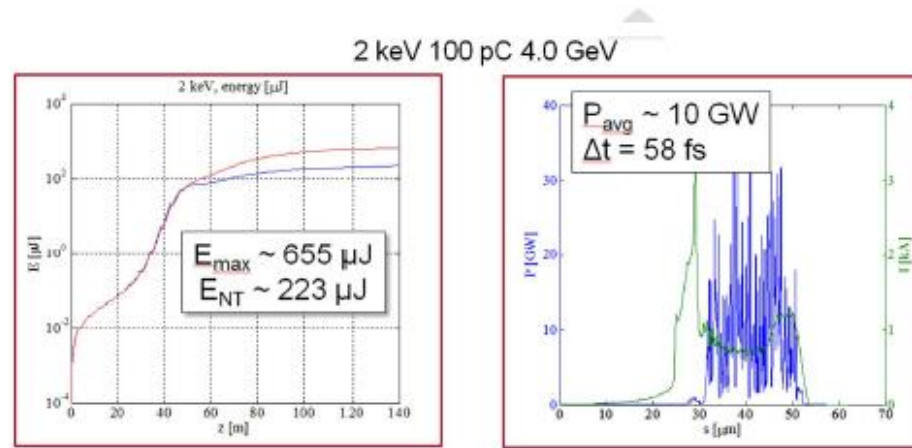


Figure 3-19. Genesis simulation of IMPACT beam in HXR at 2 keV with photon pulse energy (left) for both tapered and untapered undulator configurations; power and current profile versus bunch longitudinal position (right) for the tapered case.

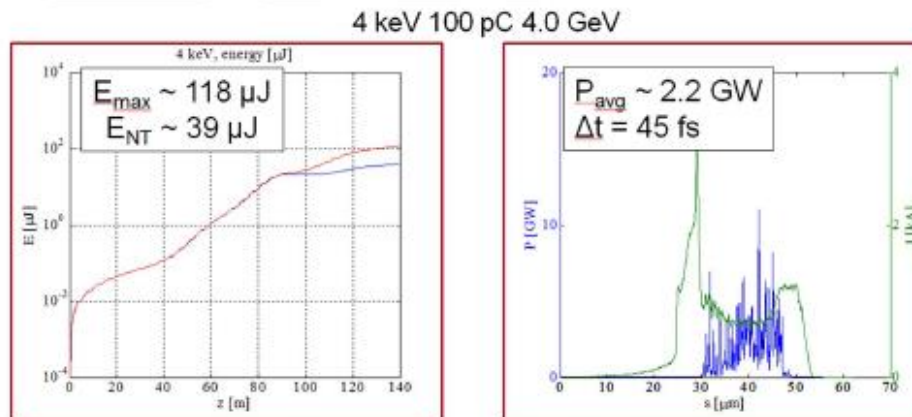


Figure 3-20. Genesis simulation of IMPACT beam in HXR at 4 keV with photon pulse energy