

Latest simulation results from MAUS

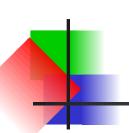
Chris Rogers,
ASTeC,
Rutherford Appleton Laboratory



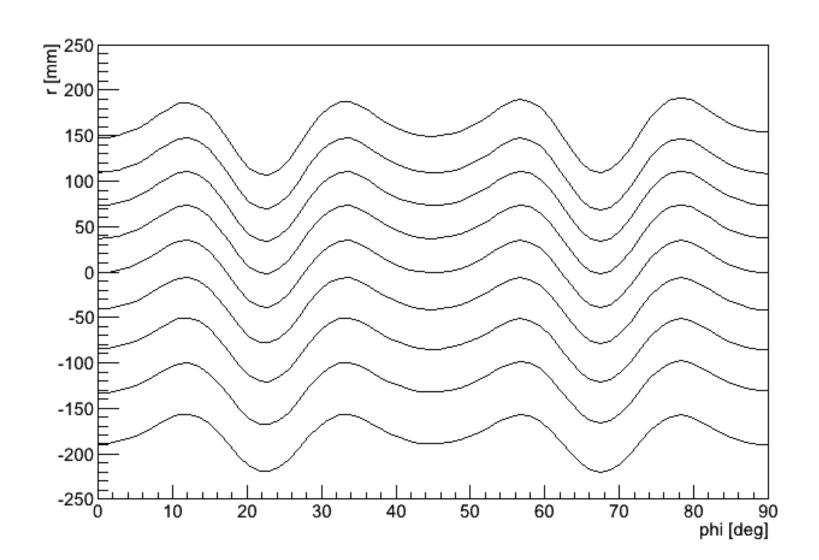


Simulation Update

- Few updates on simulation effort in MAUS
 - New simulation using field map from Yoshi
 - Thanks!
- First look at effect of absorber

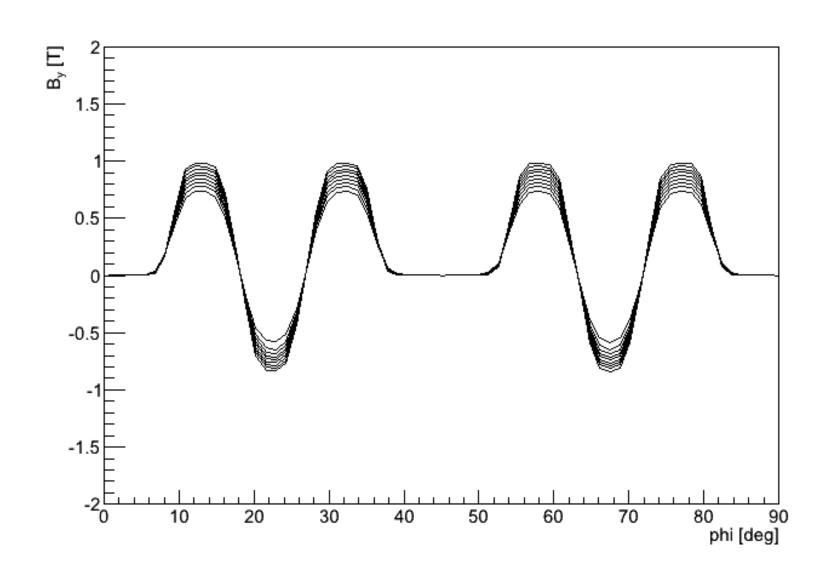


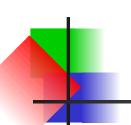
Closed Orbit



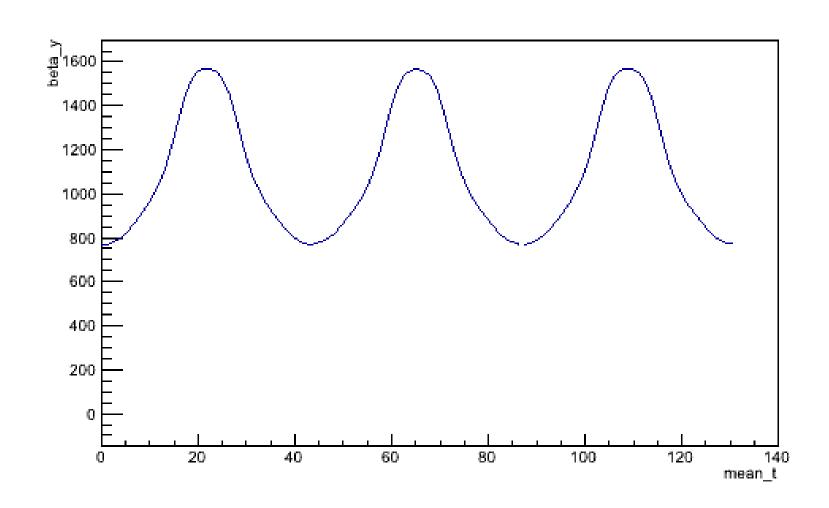


Field on closed orbits

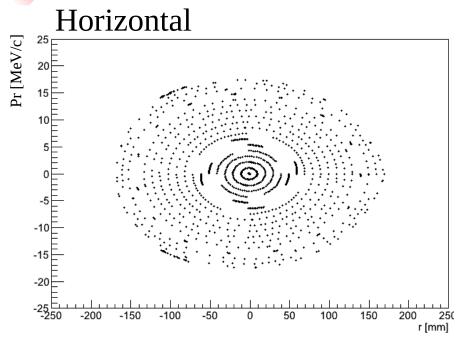


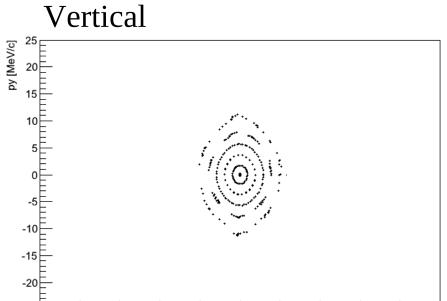


Beta y



Dynamic Aperture

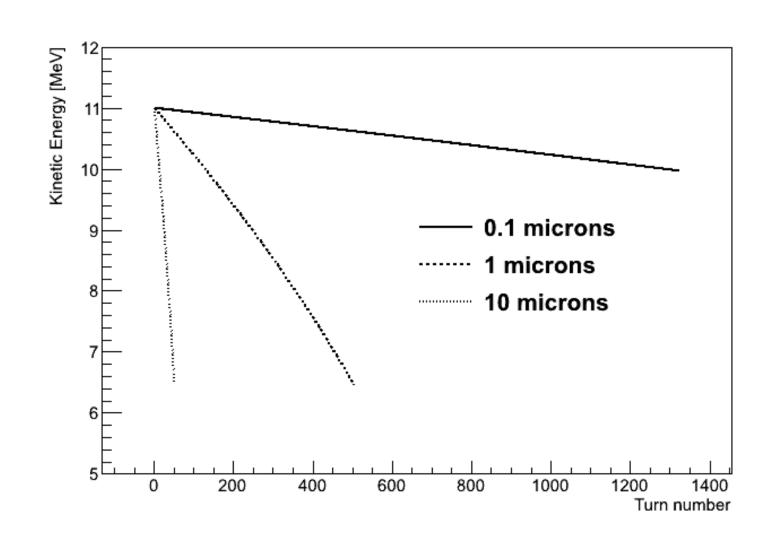




y [mm]



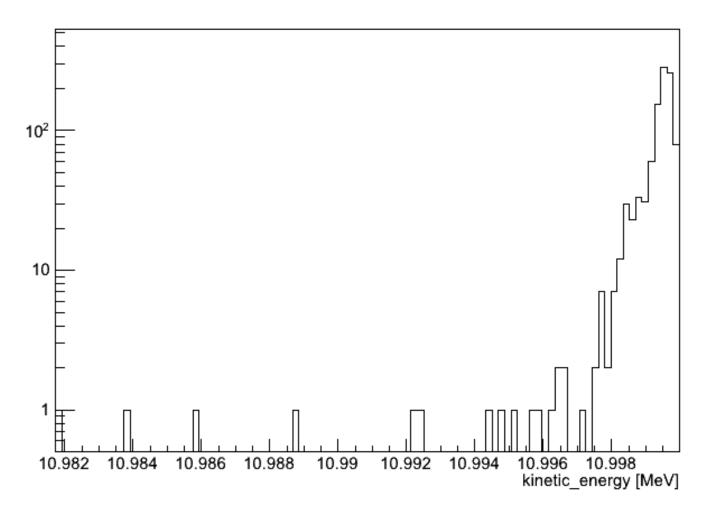
Mean Energy Loss vs thickness

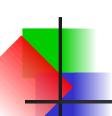


Energ

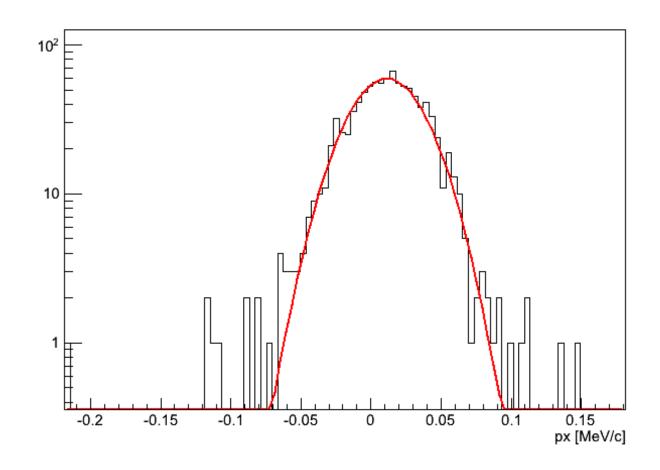
Energy Straggling

0.905 micron thickness

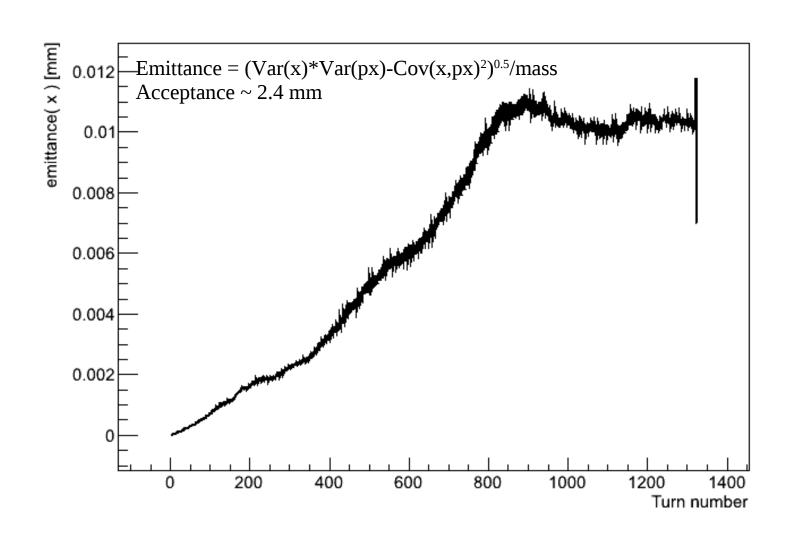




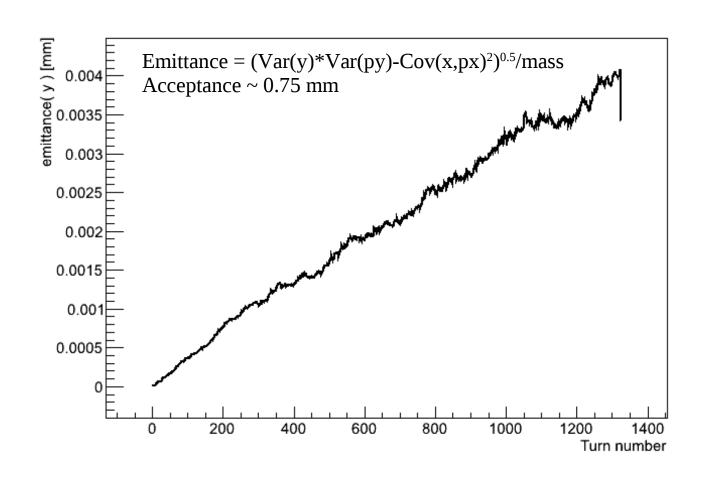
Multiple Scattering



Emittance horizontal









To Do

- Check absorber thickness
- Add apertures
- More statistics, more turns
- Start looking at injection modelling
- Investigate diagnostics
- Space charge effects of absorber probably want to use another code