

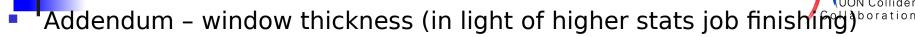


International UON Collider Collaboration

C. T. Rogers Rutherford Appleton Laboratory

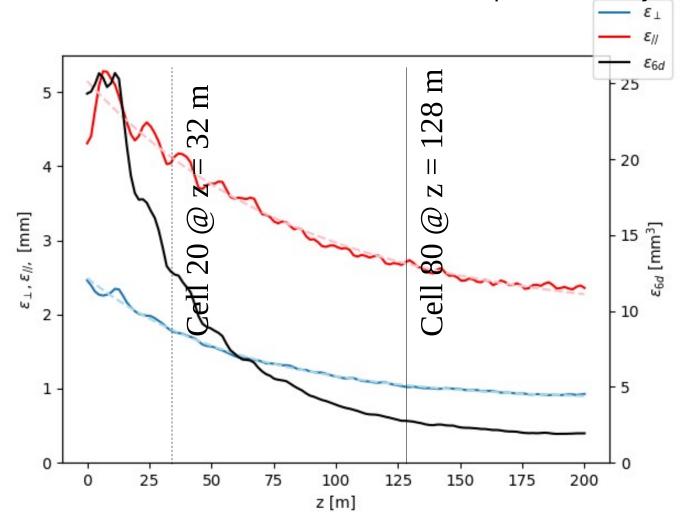


Addendum



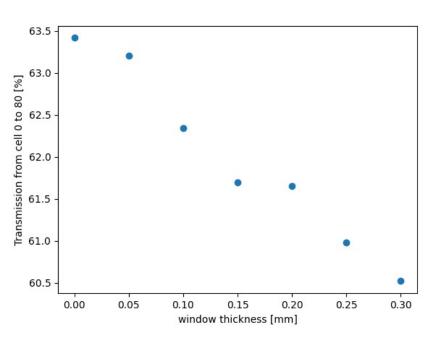
10k events per simulation (about 4-6 hours to run on 1 core)

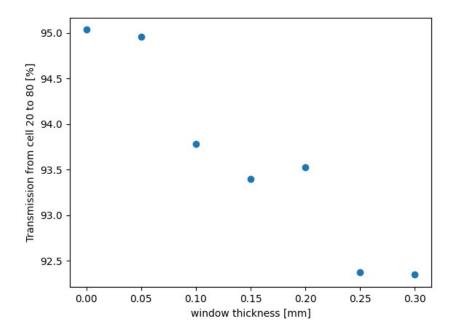
Emittances are shown for transmitted particles only



Transmission









Transverse Emittance

1.77

0.00

0.05

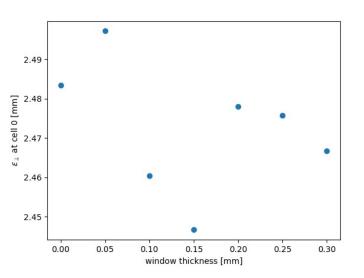
0.10

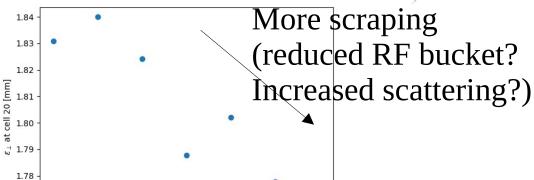
0.15

window thickness [mm]

0.20

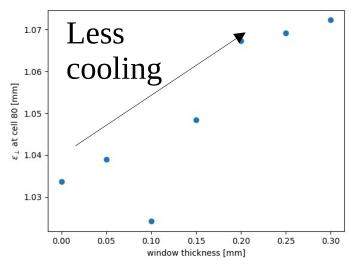


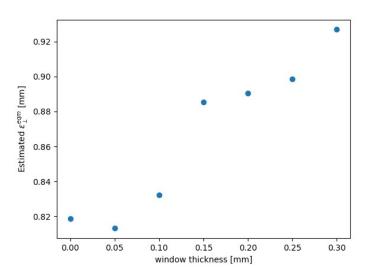




0.25

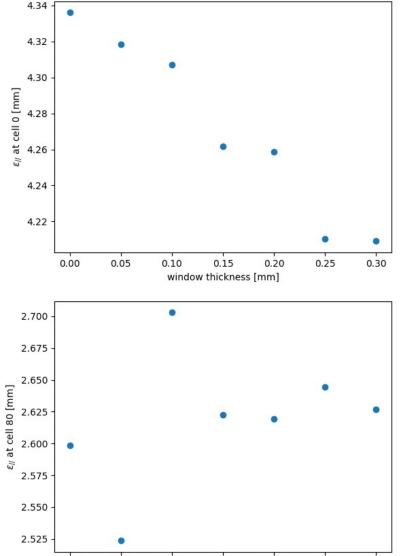
0.30





Longitudinal Emittance





0.15

window thickness [mm]

0.00

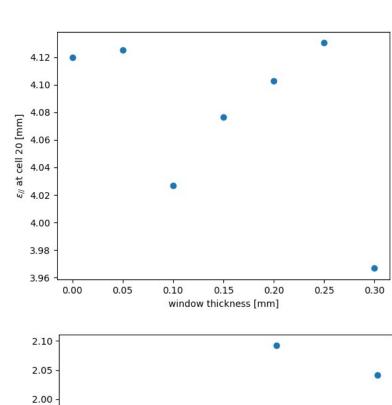
0.05

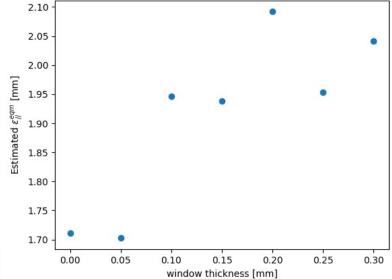
0.10

0.20

0.25

0.30





Conclusion



There is a degradation on performance from window thickness so we should keep them as thin as possible; but it is not terrible, below 300 micron thickness. If they need to go thicker I will have to do more studies.

