

RIDE Update

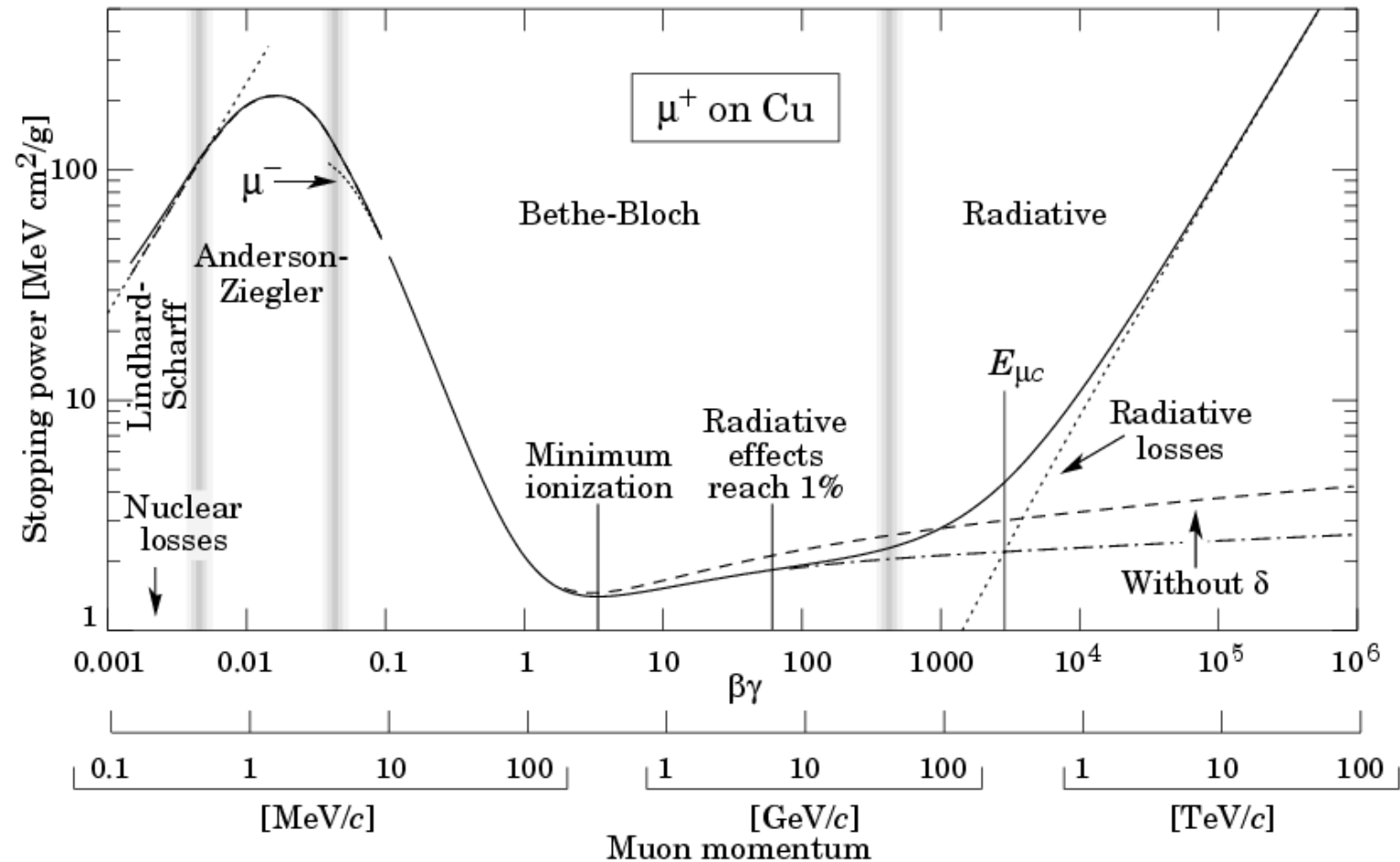
Sofus Stray

Added “close to track” criteria

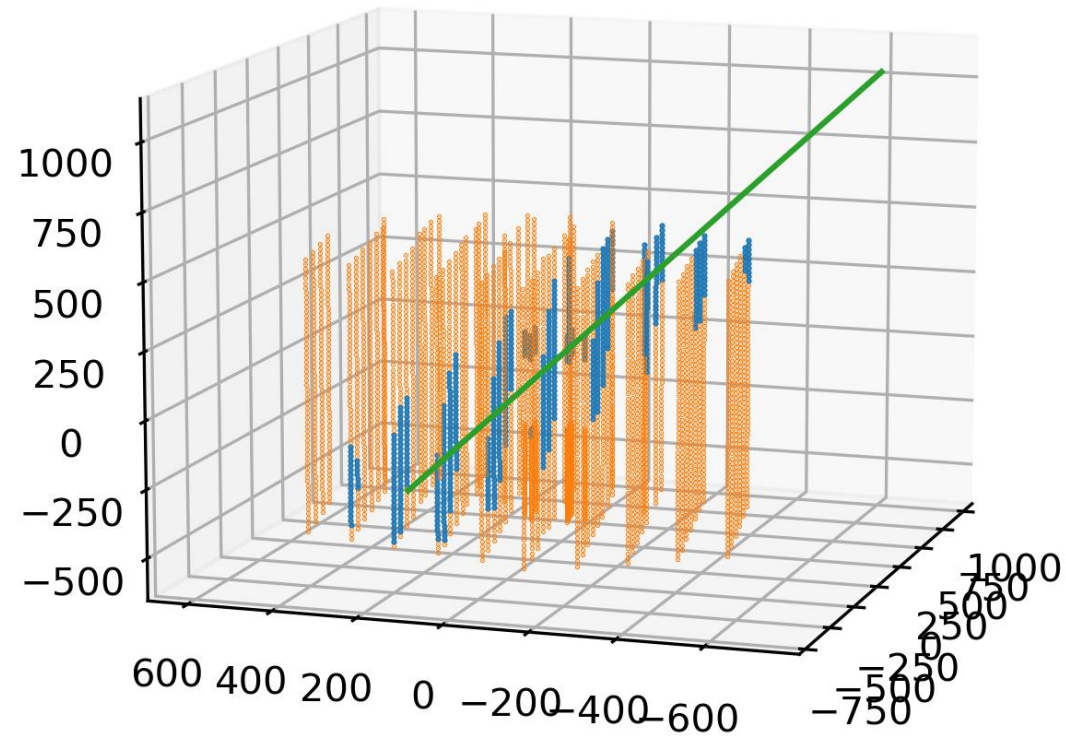
- Only keep DOM hits within X meters of the track
- Eliminates possible noise
- Uses true simulation position of track
- Only include the final 200 meters of the track
 - Makes sure every track is in the minimum ionizing range

Last 200 meters

- Minimum ionization in order of 10 GeV
- We lose roughly 1 GeV per 4 - 5 meters
- Last 200 meters will go from 40 – 50 GeV to 0 GeV



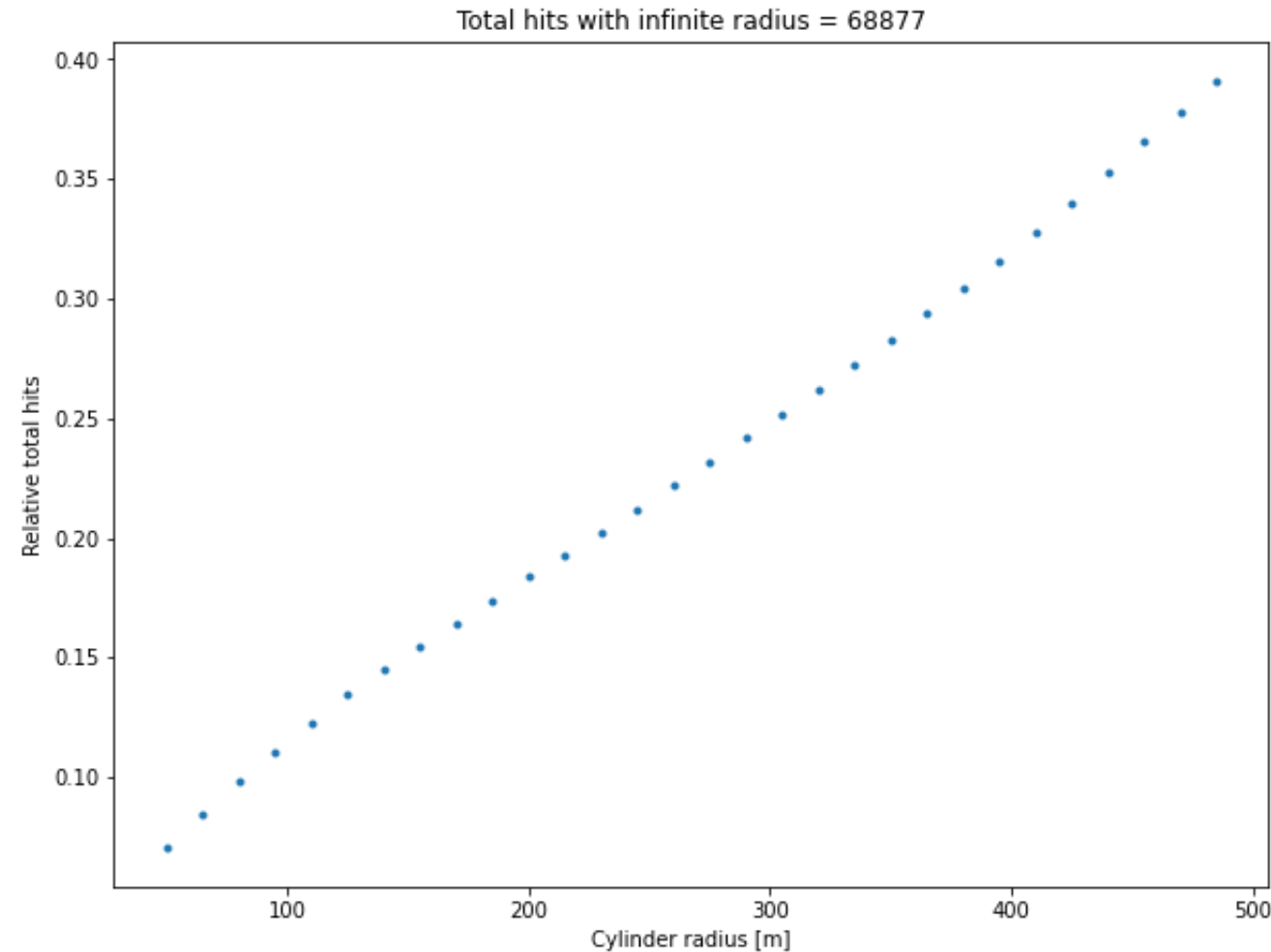
“Close to track”



Radius is 200 meters for illustration purposes

DOM hits lost

- Smaller cylinder radius means less accepted DOMs
- Dependence is (somewhat) linear
- Most data lost at lower (< 100) radii
- Compensate with more initial data



Current plans

- Get Corsika data loaded up
- See effect of “close to track” radius on RIDE
- If good results, possibly move onto reconstructed tracks