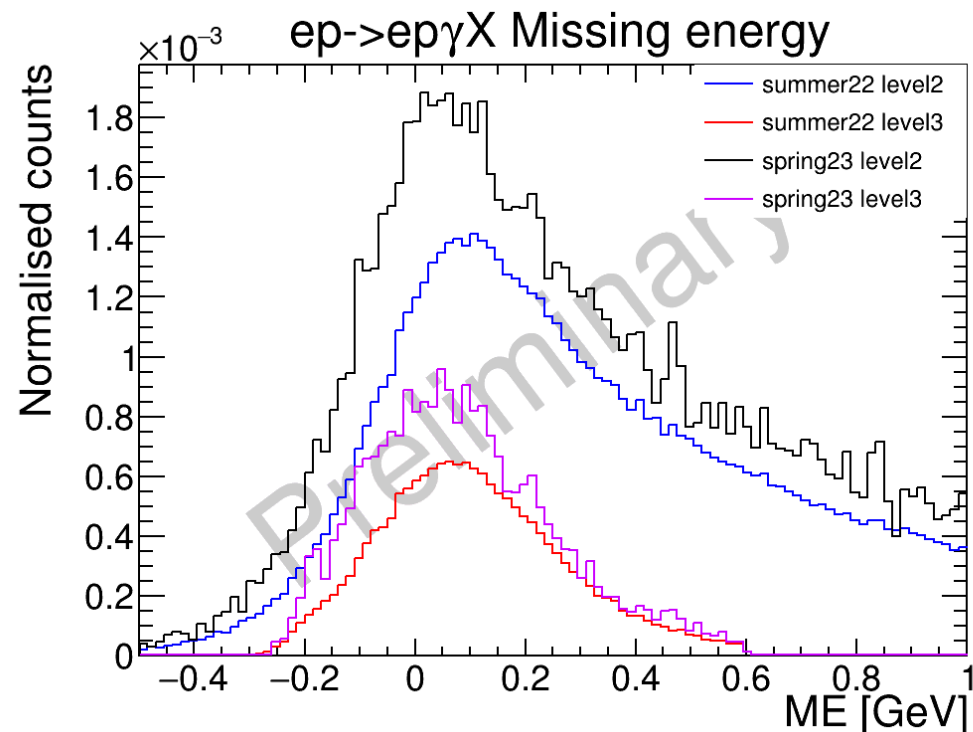


Vertex and spring23 pDVCS

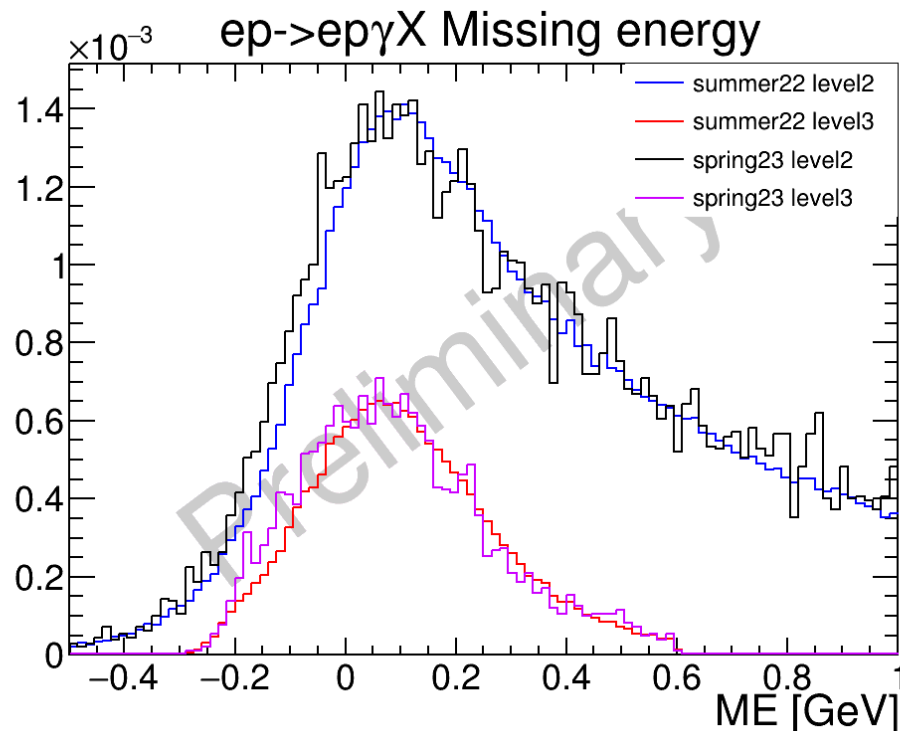


Samy Polcher Rafael
Supervisor: Francesco Bossù

Exclusivity variables, spring23 test runs



All runs, 017485, 017577, 017737, **017776**, 017567,
017608, 017759, **017810**



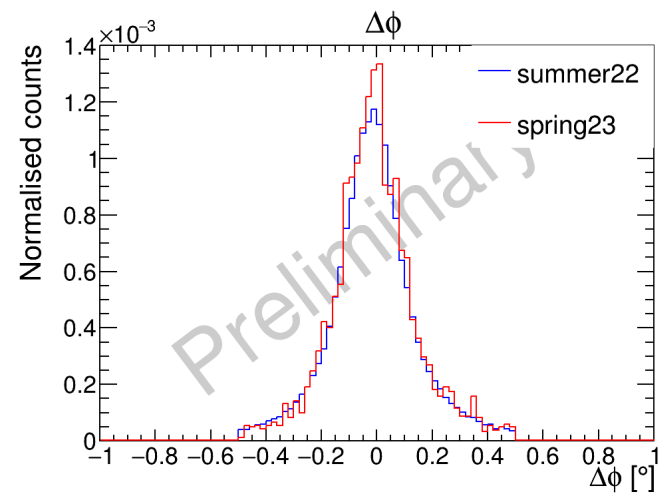
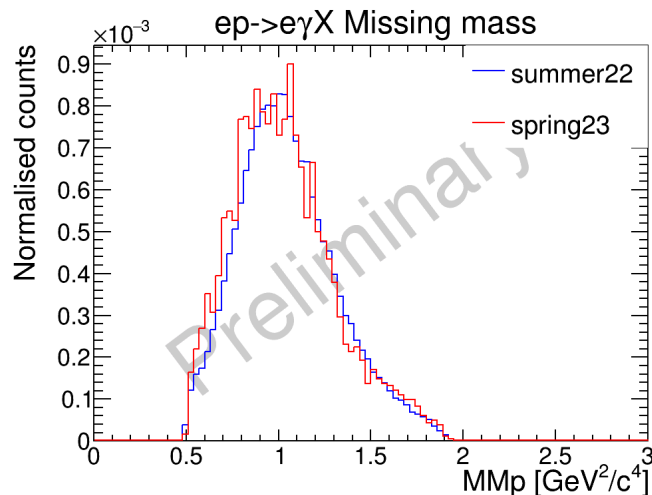
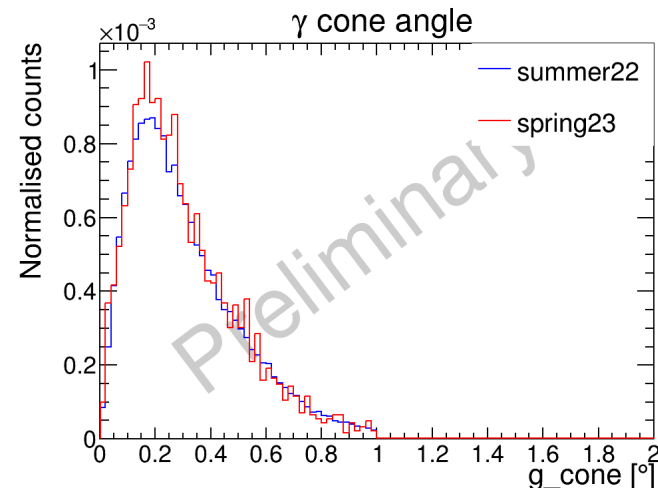
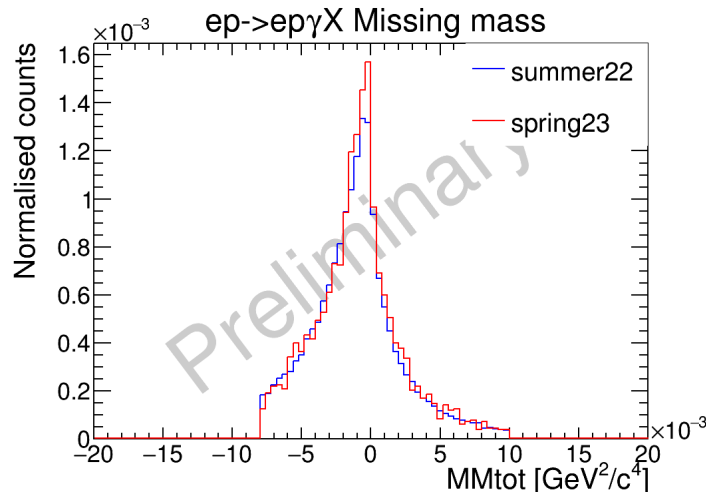
Only inbending runs in spring23

There is more DVCS events per Fcup charge in outbending runs.

pDVCS exclusivity variables summer22/spring23 inbending

All inbending test spring23 runs:

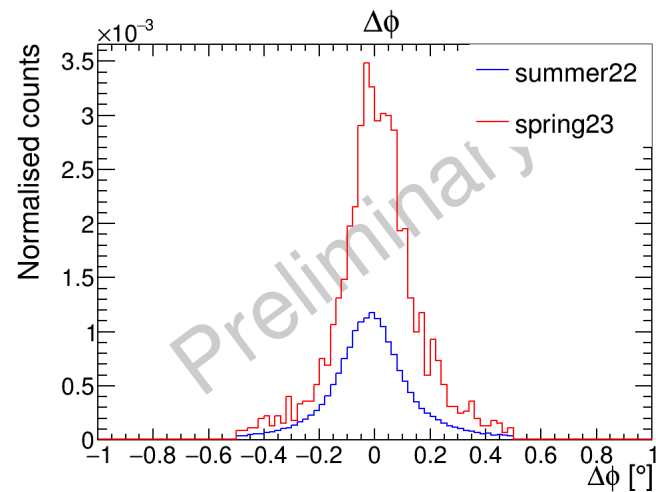
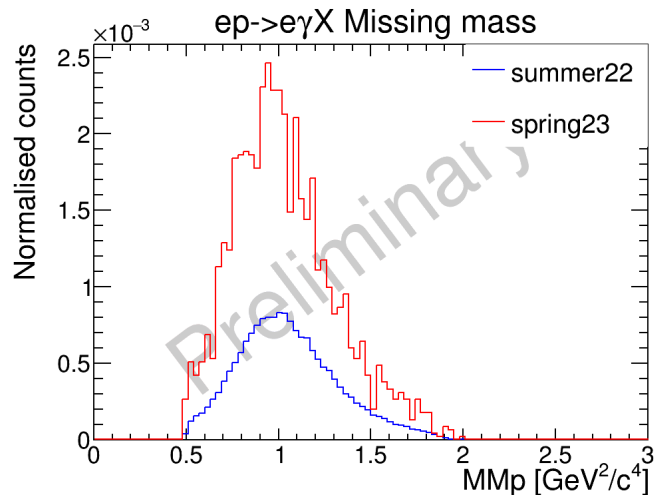
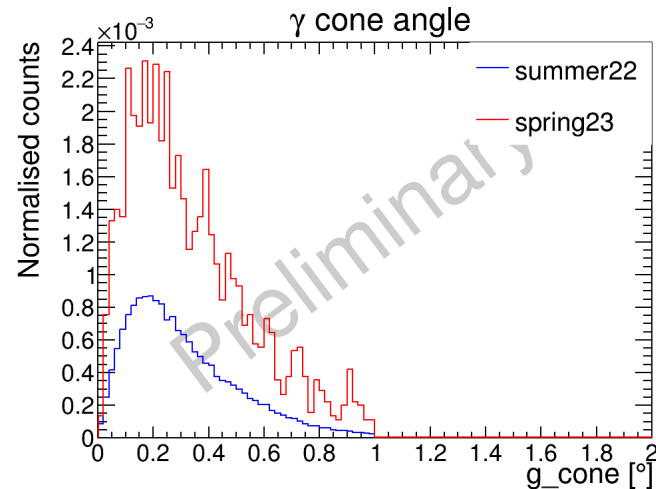
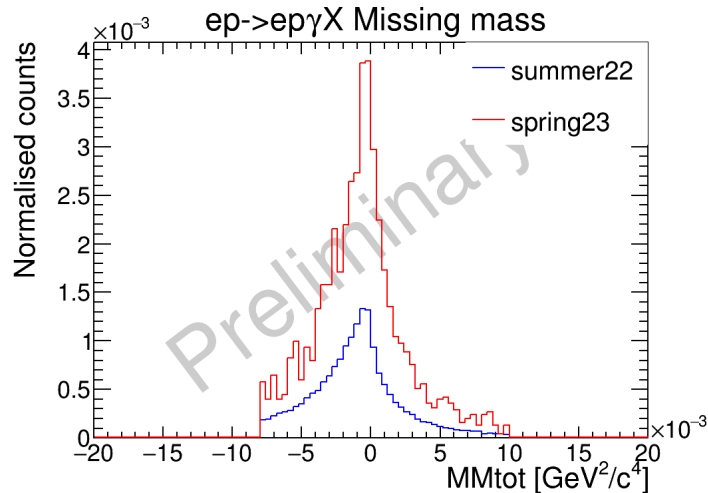
017485, 017577, 017737,
017567, 017608, 017759



pDVCS exclusivity variables summer22/spring23 outbending

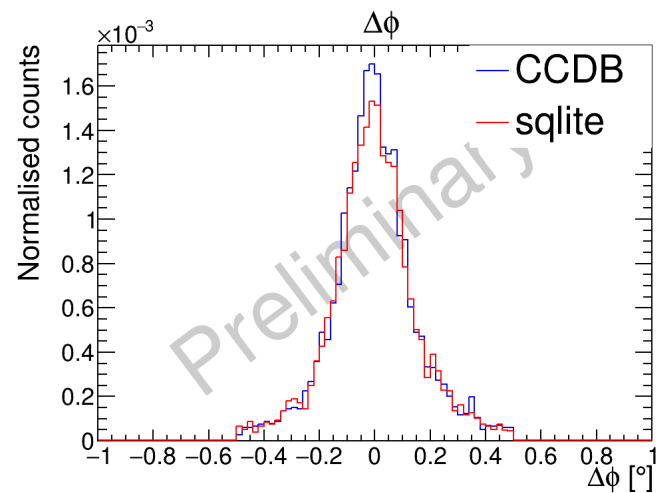
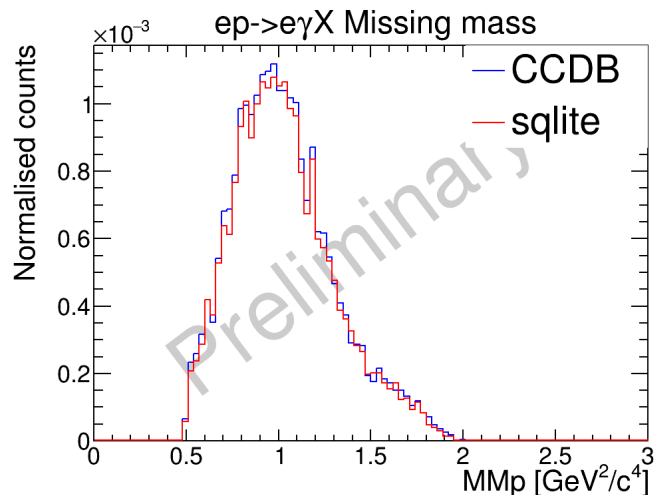
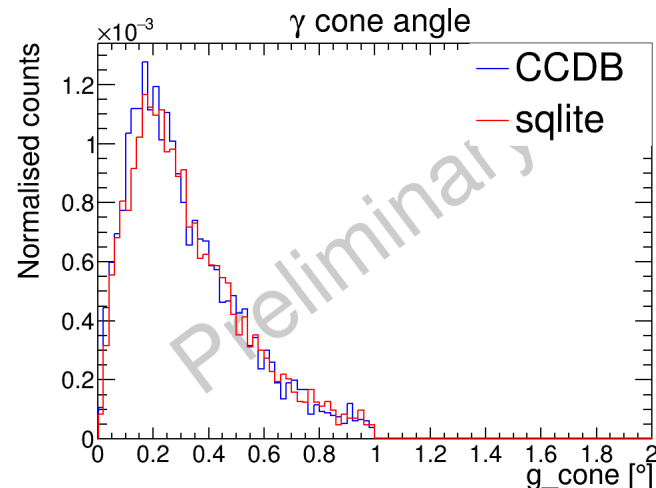
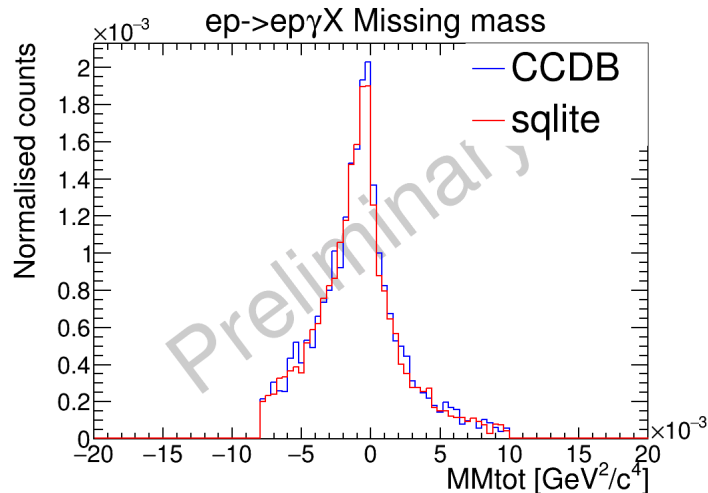
All outbending test spring23 runs:

17776, 17810



pDVCS exclusivity variables CCDB/sqlite

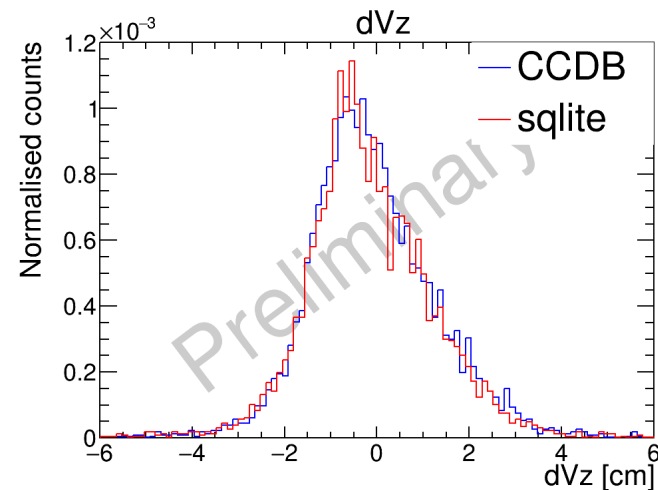
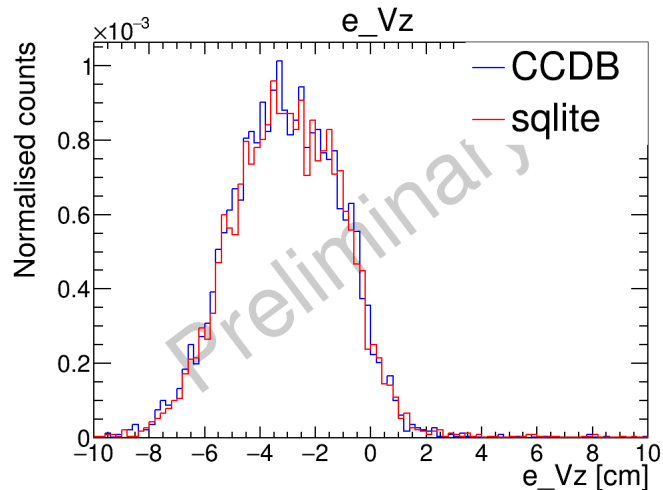
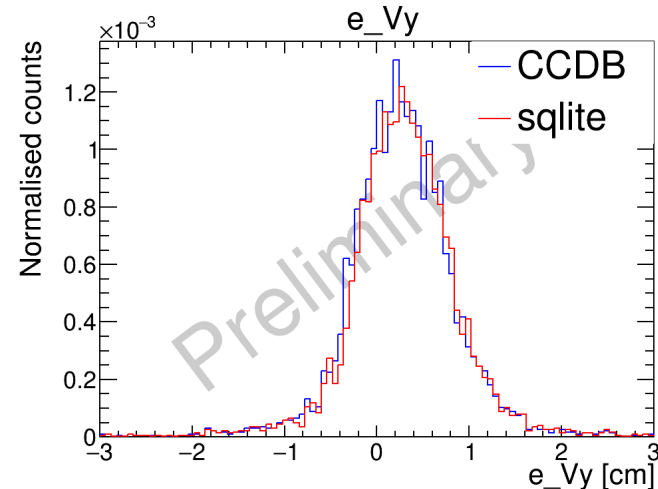
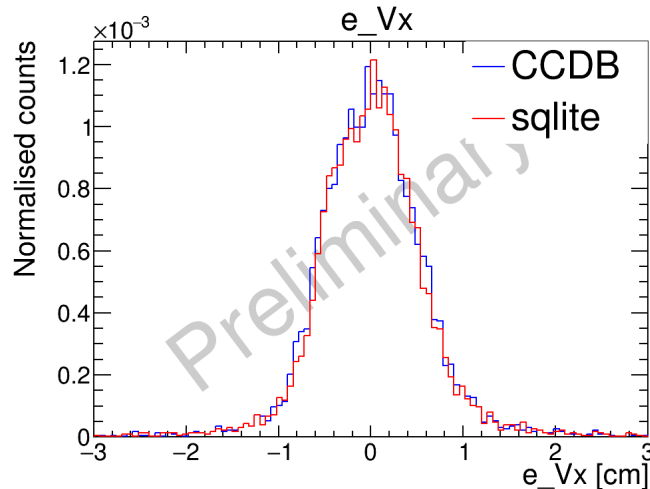
All spring23 test runs



pDVCS electron vertex, CCDB/sqlite

All spring23 test runs (both
inbending and outbending)
 $dVz = p_Vz - e_Vz$

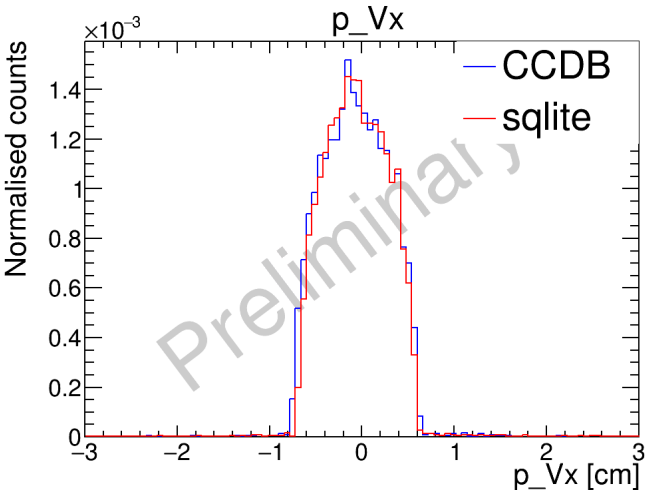
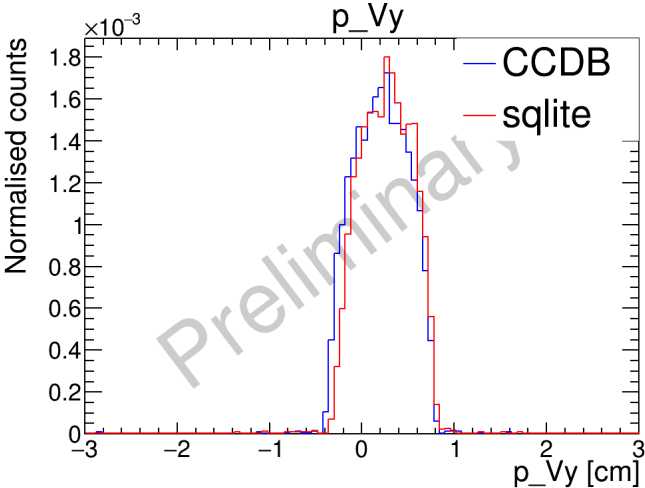
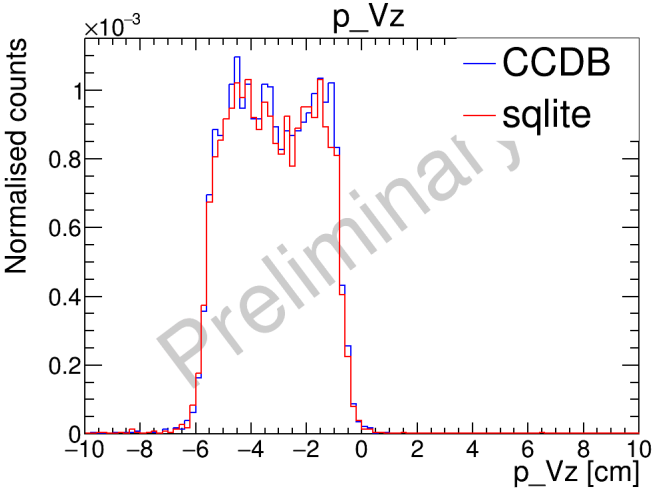
Small shift in y vertex



pDVCS proton vertex, CCDB/sqlite

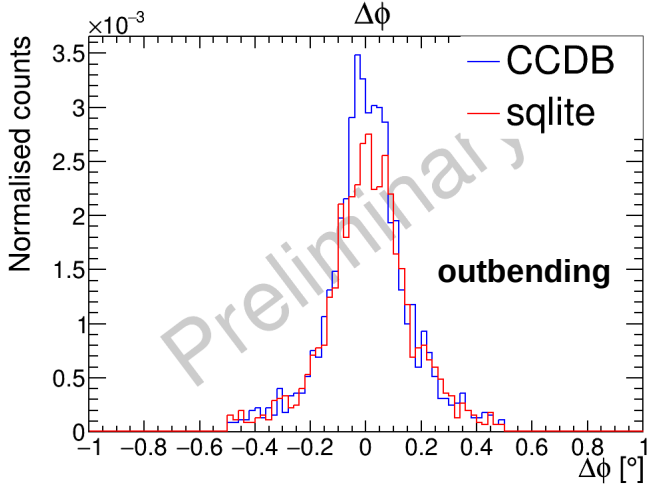
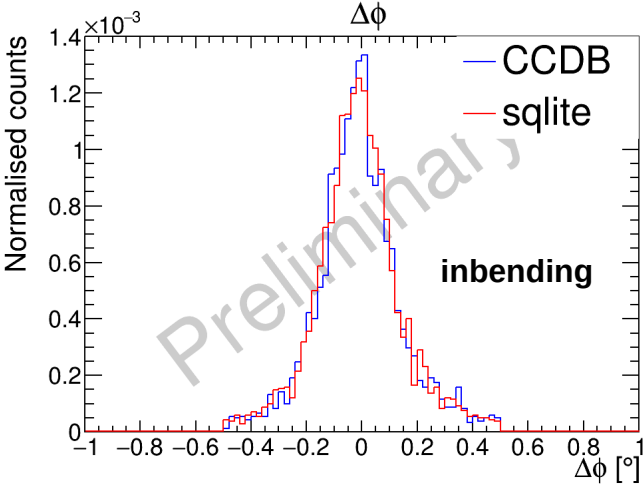
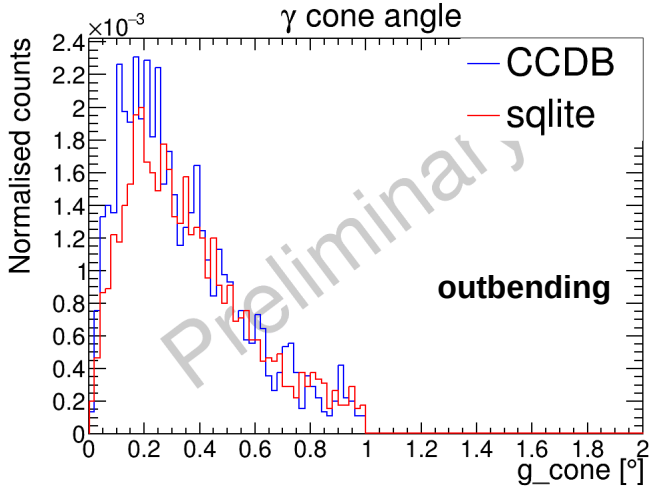
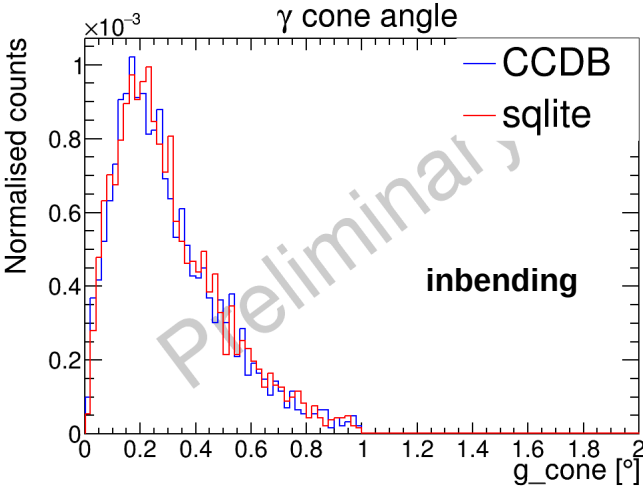
All test runs (both
inbending and outbending)

Shift in y vertex



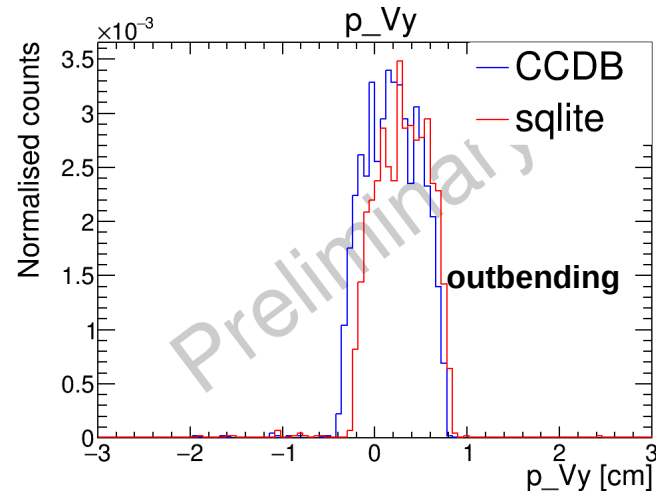
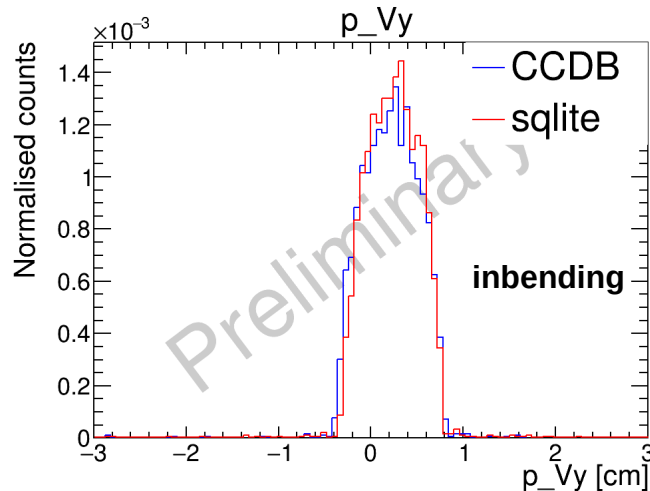
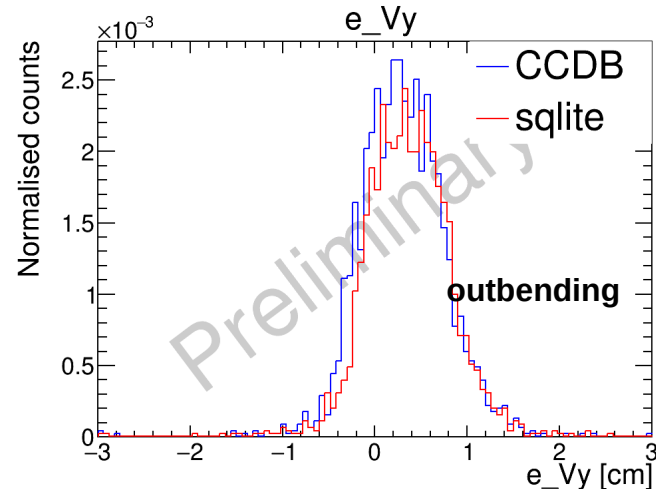
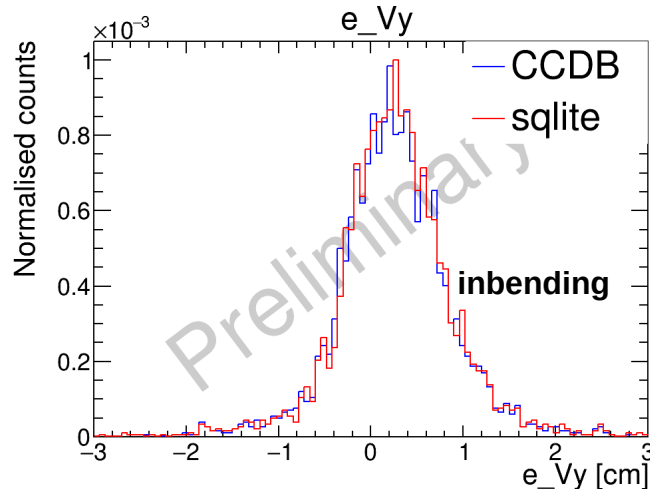
pDVCS, CCDB/sqlite inb vs outbending

The difference between CCDB and sqlite is larger in outbending



pDVCS, CCDB/sqlite inb vs outbending, y vertex

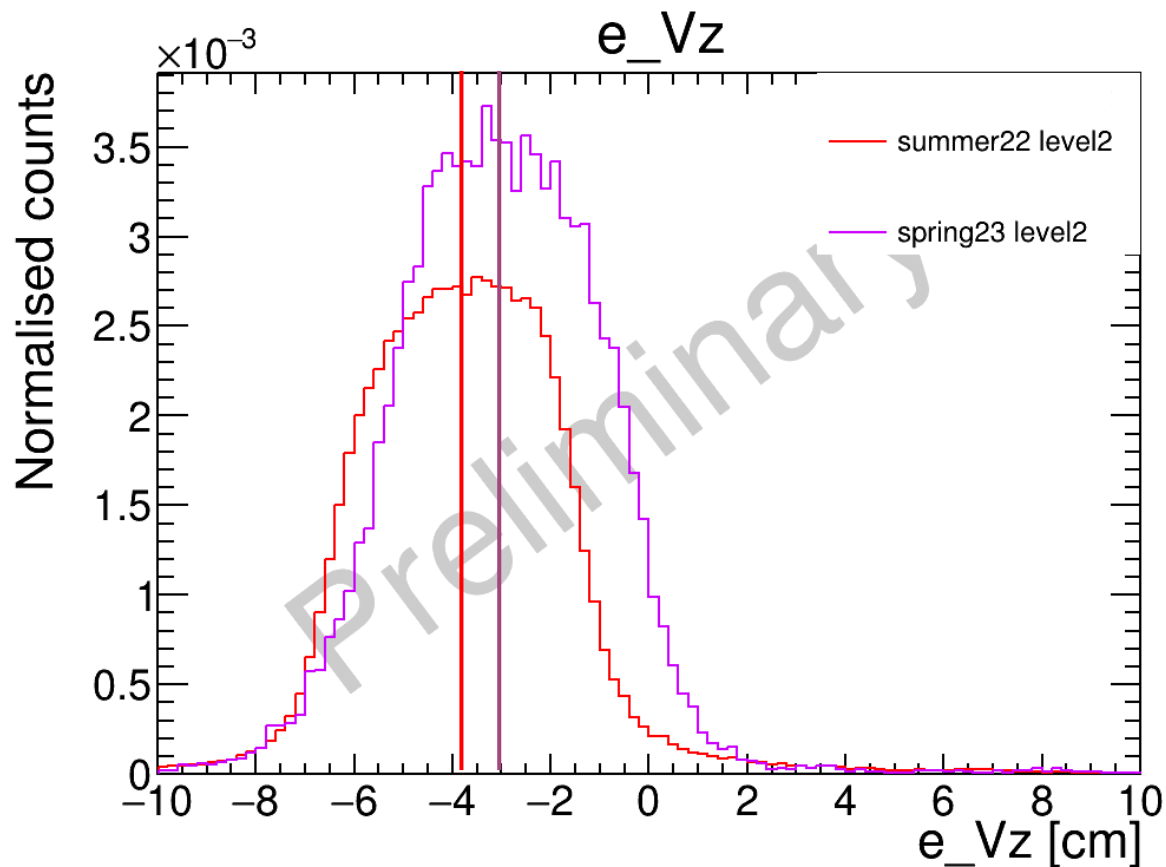
The difference between CCDB and sqlite is larger in outbending



Vertex z, summer22 vs spring23

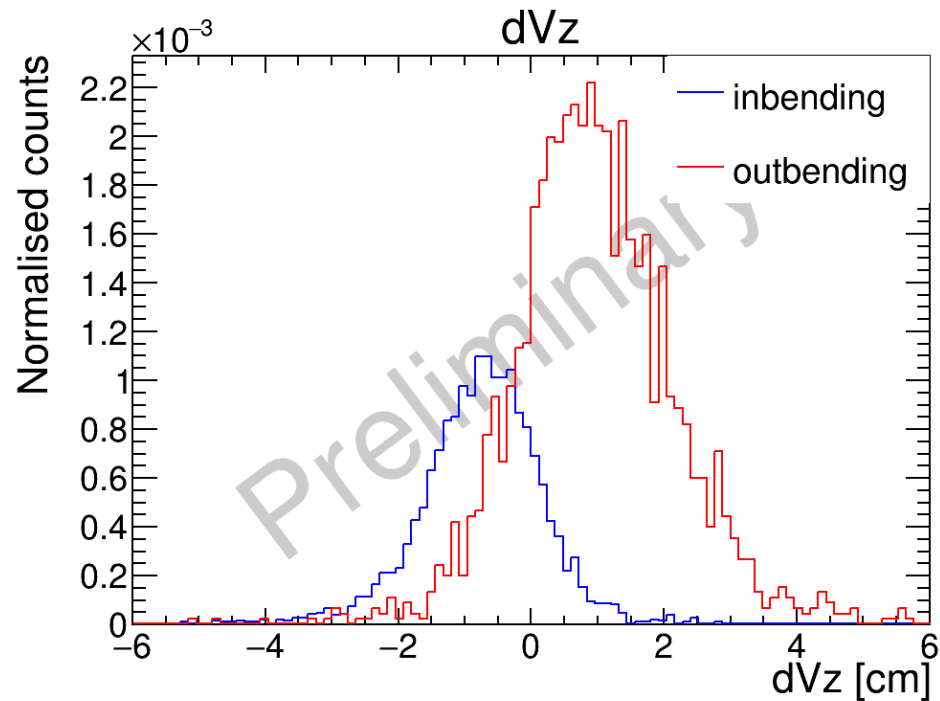
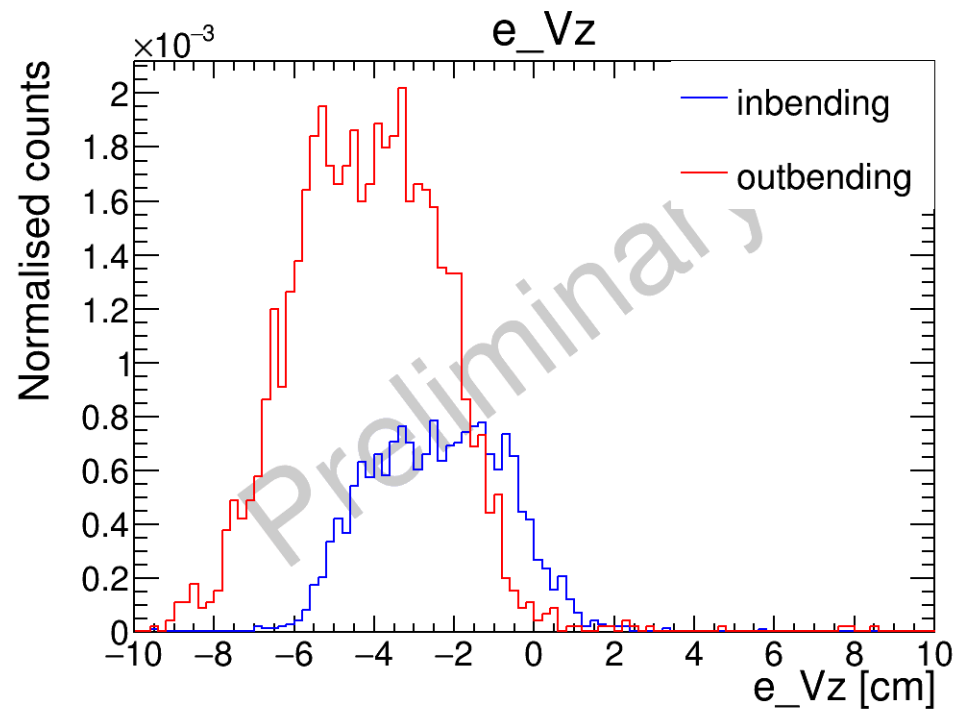
Z vertex for electron

~0.8cm difference in the center of the target position.



Vertex z, spring23 outbending vs inbending

$$dVz = p_Vz - e_Vz$$

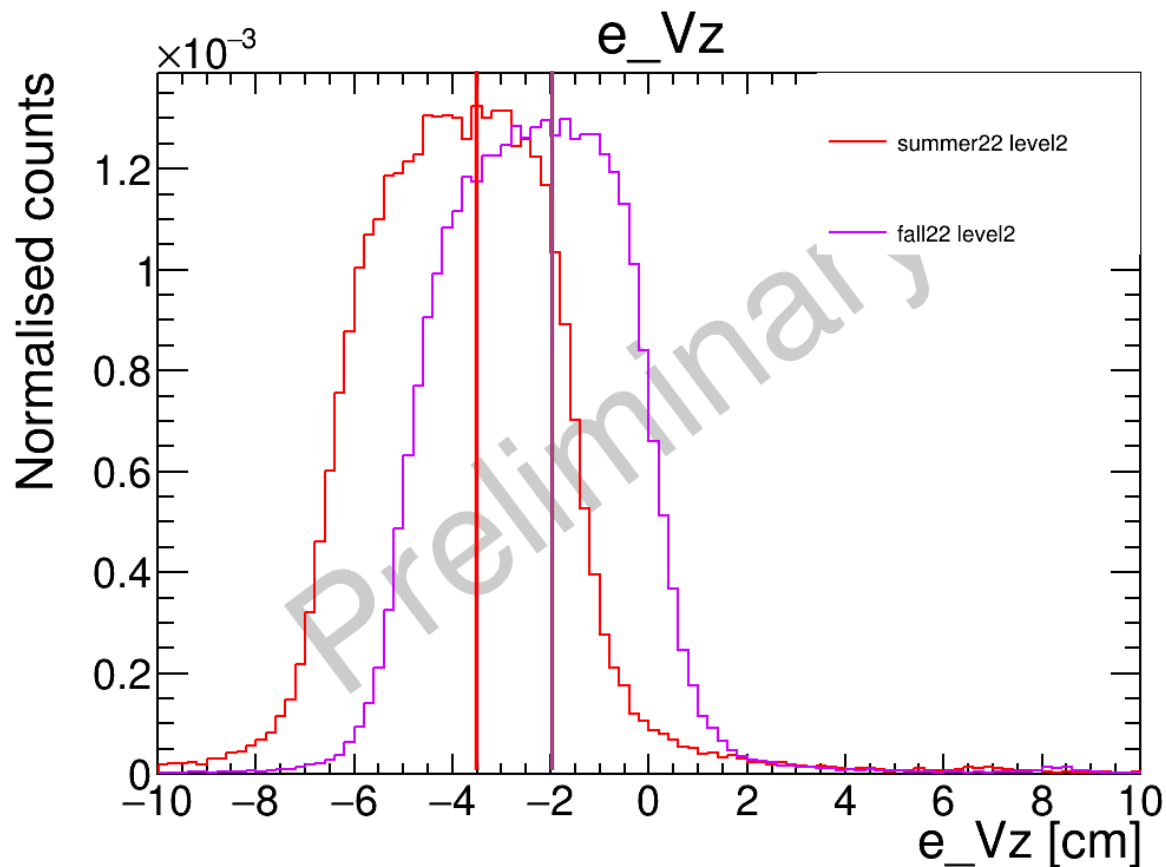
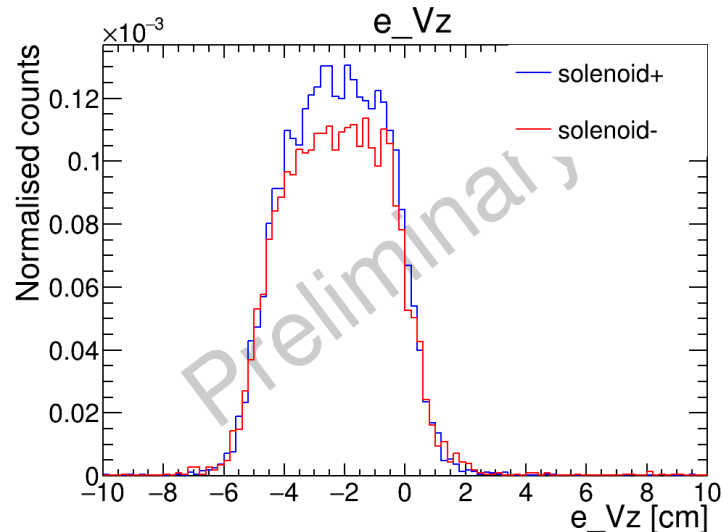


Vertex z, summer22 vs fall22

Z vertex for electron (level2 cuts with photon in the FD)

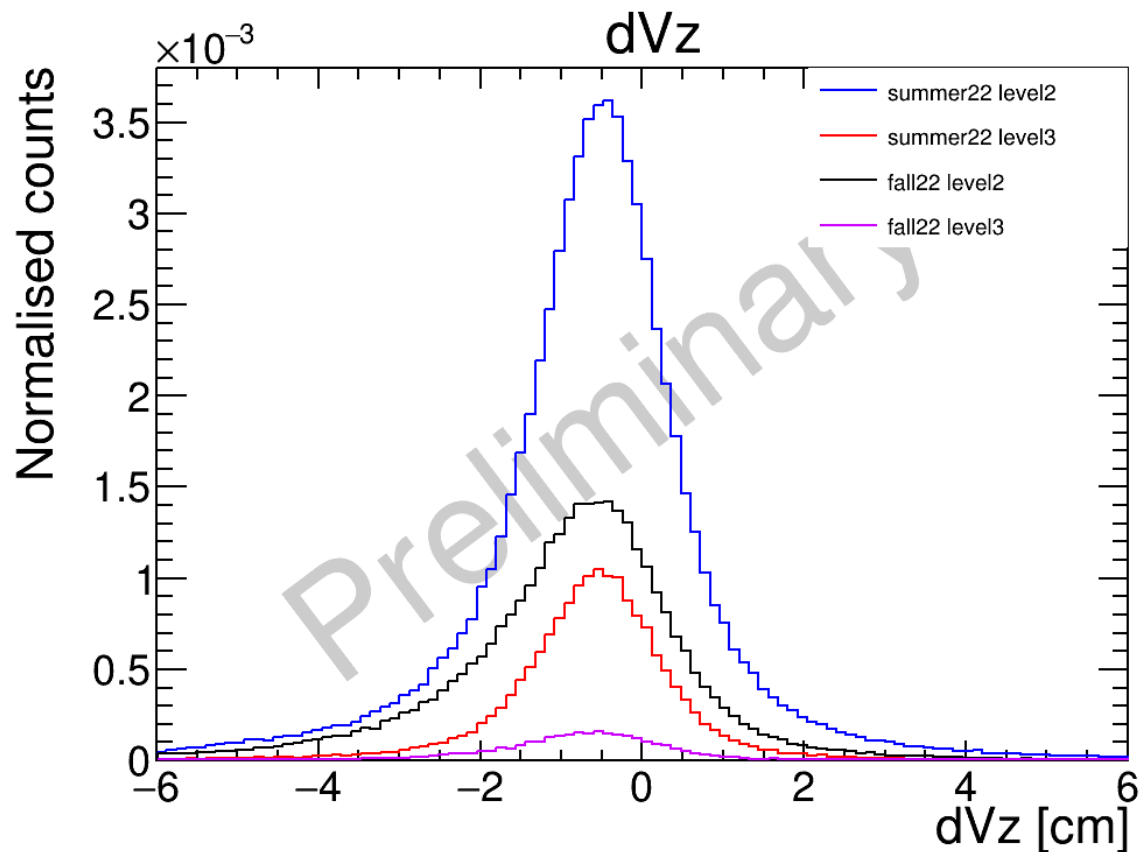
~1.5cm difference in the center of the target position.

Solenoid+ RN < 17185



Difference between electron and proton vertex

$dVz = e_Vz - pVz$
Offset of about 5mm



dVz per sector

dVz for all electrons in each FD sector fitted with a gaussian.

