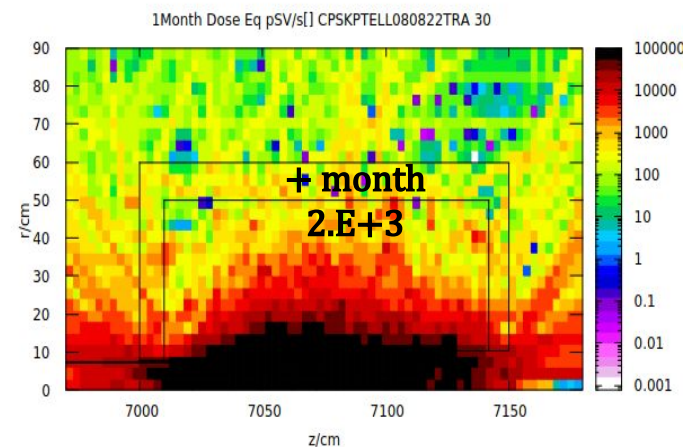
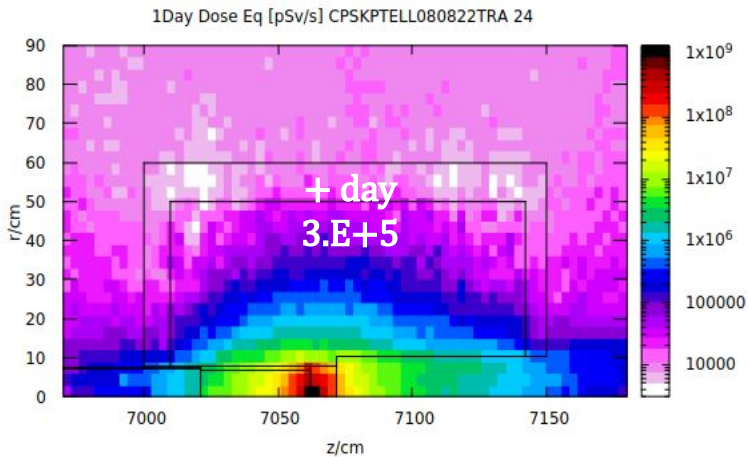
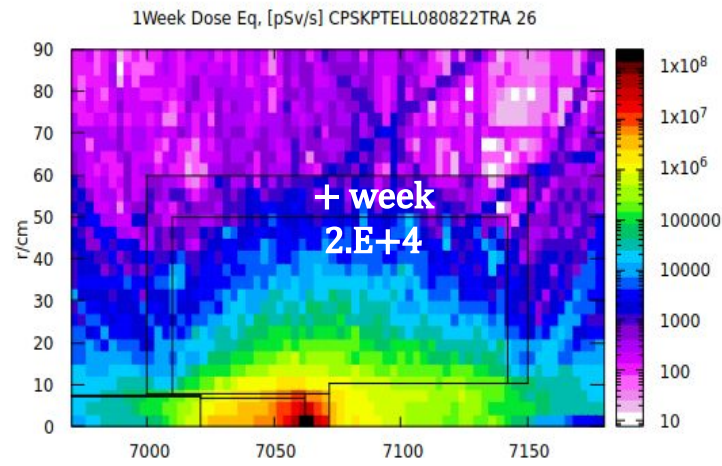
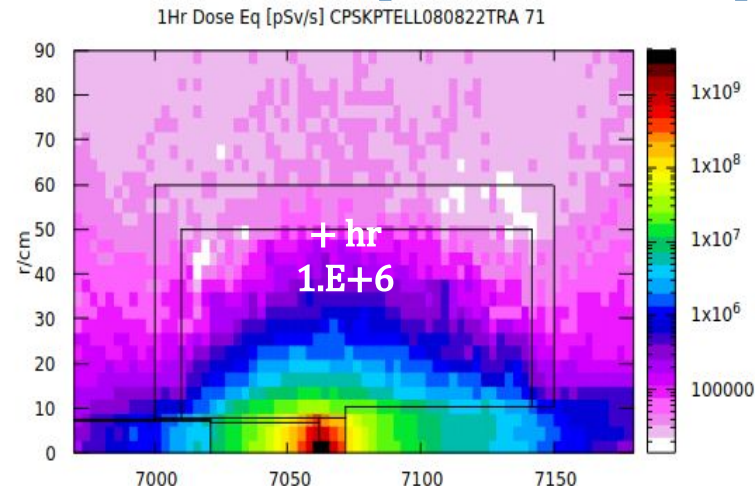


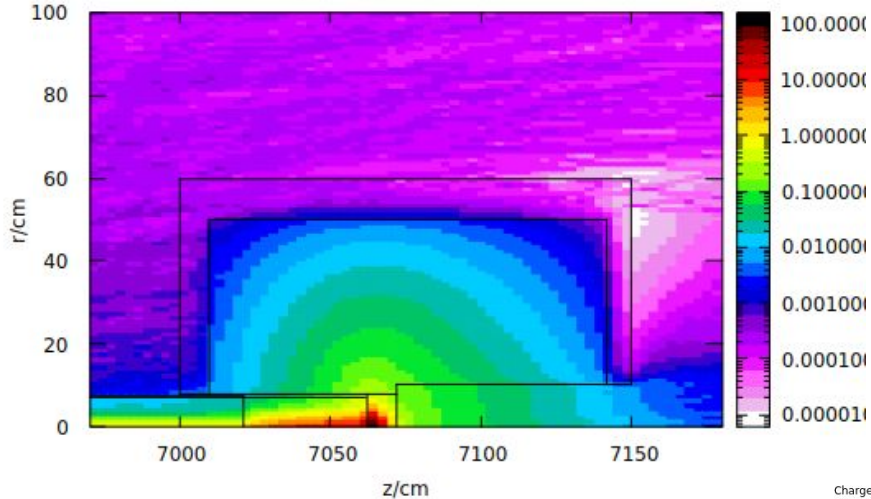
Kaon Production Target

After 1000 hr of operation Dose Equivalent in and around the KPT.

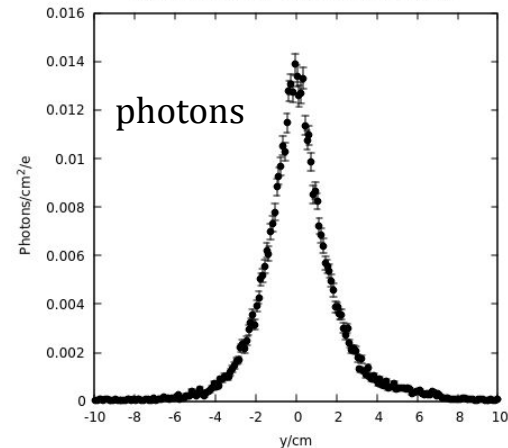


KPT prompt Dose Eq and photon Beam at KPT.

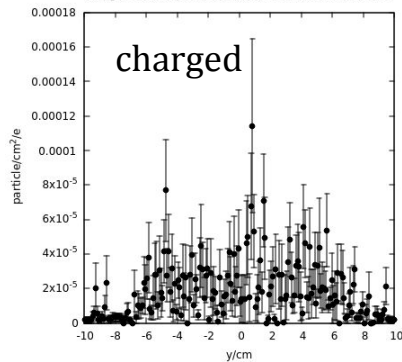
Prompt Dose Eq. [GeV/g/e] CPSKPTCELL080822TRA 53



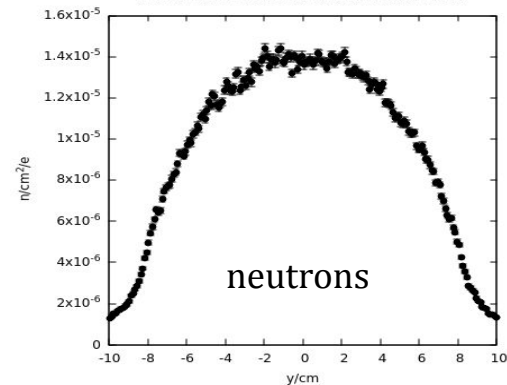
Photon profile at KPT CPSKPTCELL080822TRA 61



Charged Particle profile at KPT CPSKPTCELL080822TRA 64

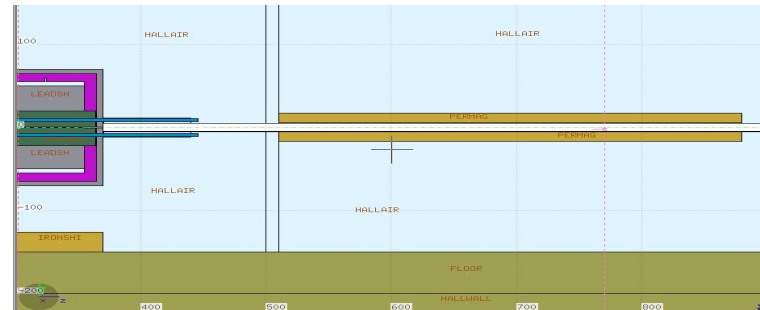
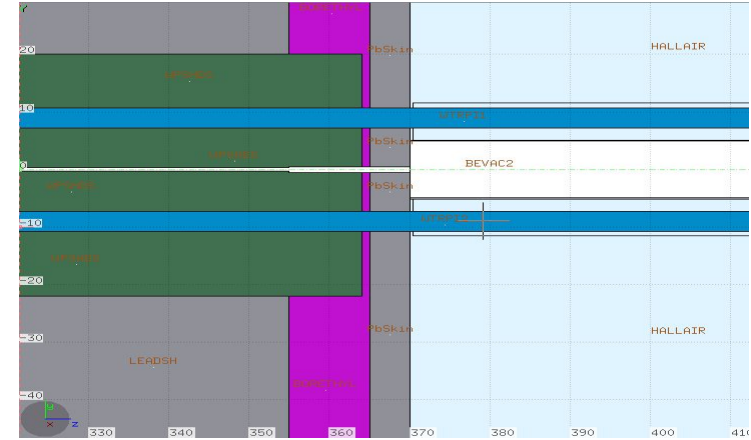
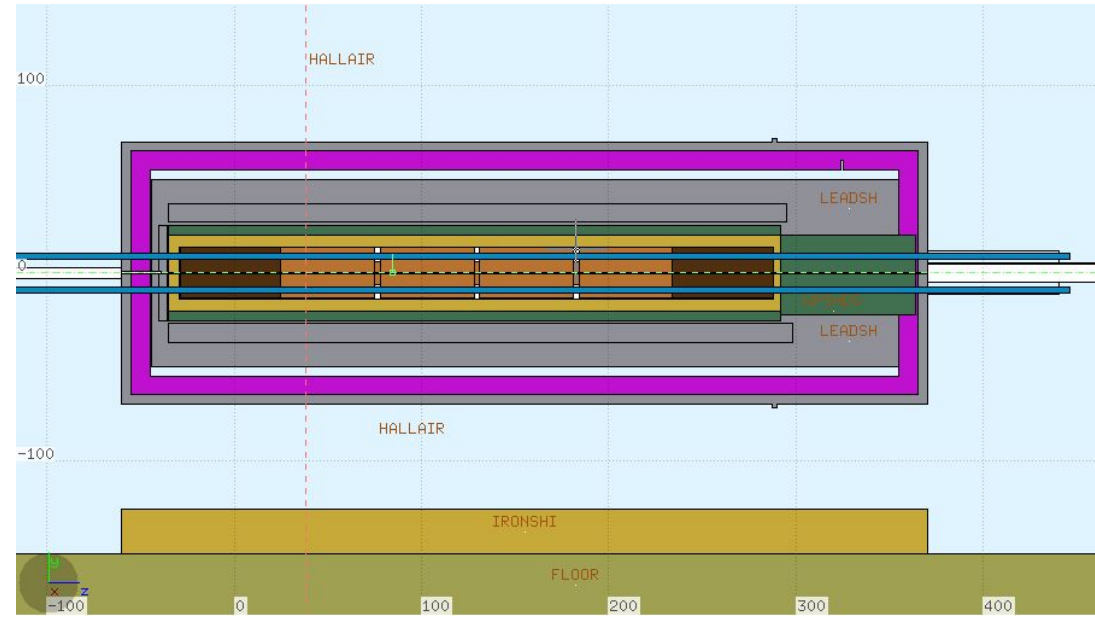


Neutron Profile at KPT CPSKPTCELL080822TRA 63

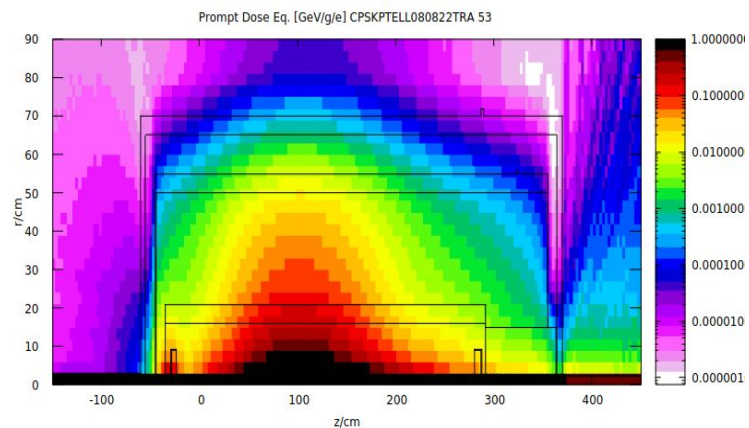
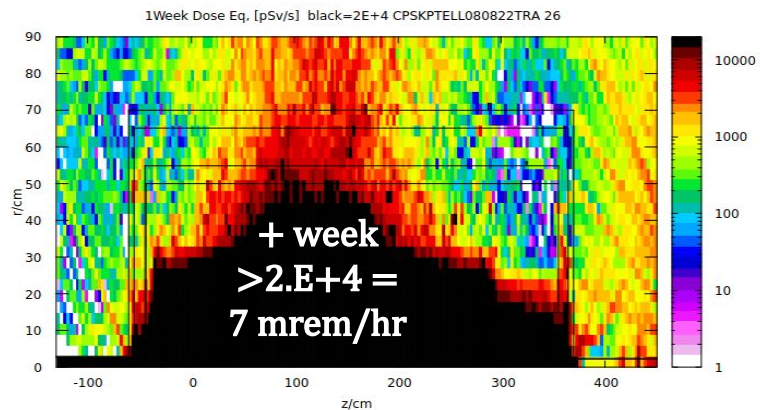
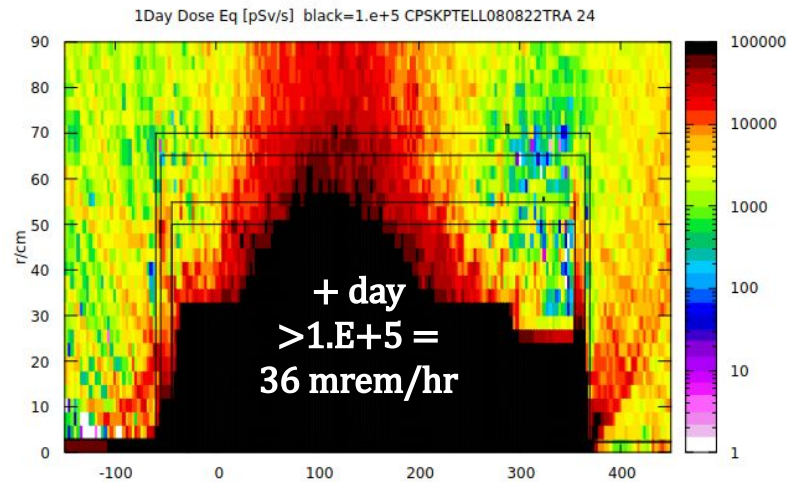
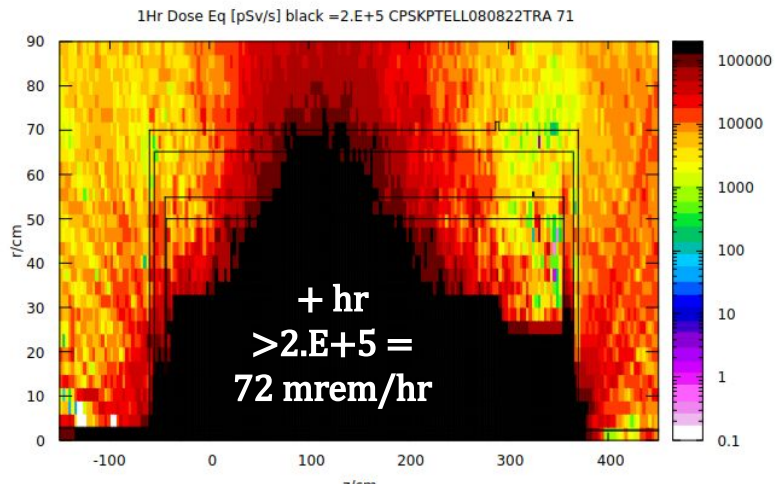


Compact Photon Source

CPS Latest Model with Segmented Absorber and Trimmer at the CPS exit

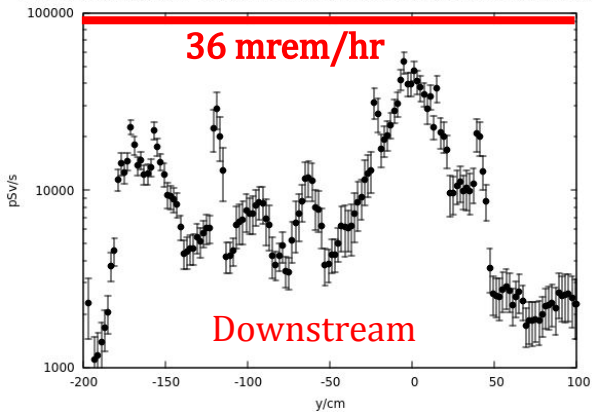


Latest Model. After 1000 hr + Dose Equivalent profiles within 1' around the CPS.

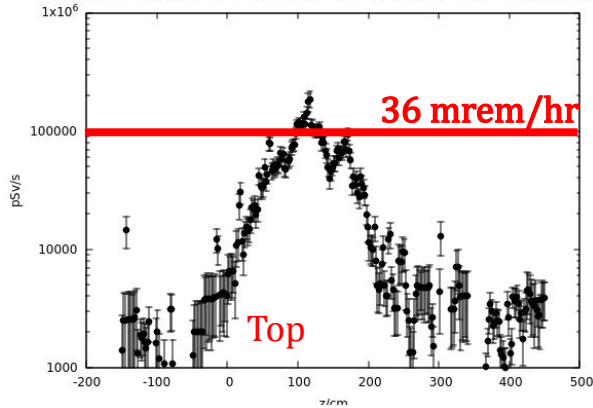


Latest Model. After 1000 +1 hr Dose Equivalent profiles within 1' around the CPS.

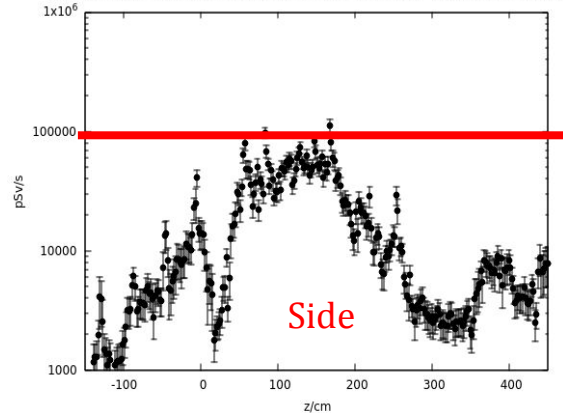
1 Hr Dose Eq downstr. CPS, $370 < z/cm < 400$ $|x/cm| < 20$ $B=.24/.25/.22T$ CPSKPTCELL080822T



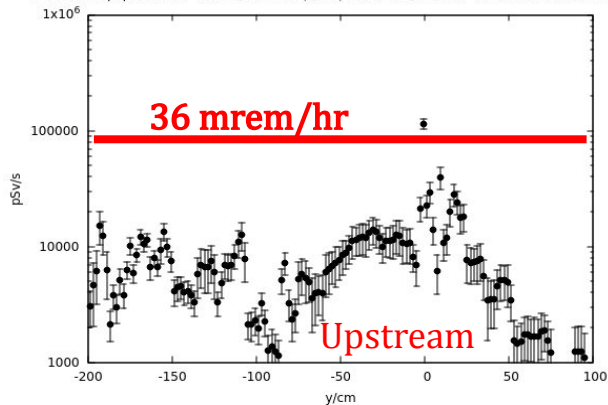
1 Hr Dose Eq top CPS, $70 < y/cm < 100$ $|x/cm| < 20$ $B=.24/.25/.22T$ CPSKPTCELL080822TRA :



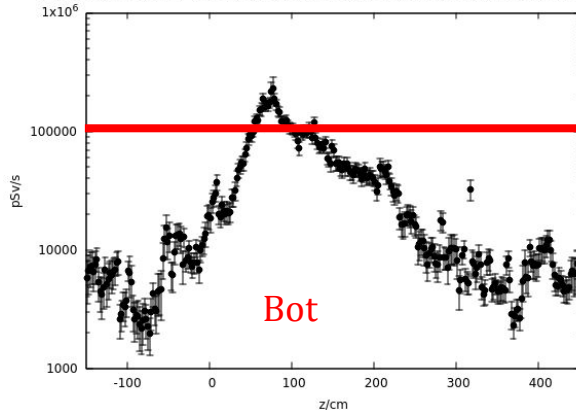
1 Hr Dose Eq side CPS, $70 < x/cm < 100$ $|y/cm| < 20$ $B=.24/.25/.22T$ CPSKPTCELL080822TRA :



1 Hr Dose Eq upstr. CPS, $-100 < z/cm < -70$ $|x/cm| < 20$ $B=.24/.25/.22T$ CPSKPTCELL080822TRJ

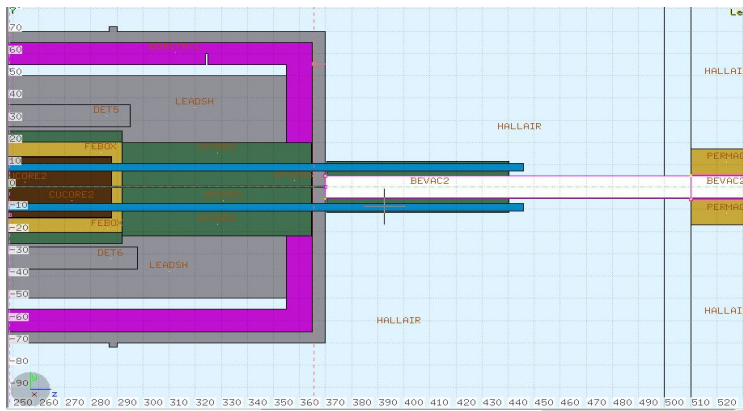


1 Hr Dose Eq bott. CPS, $-100 < y/cm < -70$ $|x/cm| < 20$ $B=.24/.25/.22T$ CPSKPTCELL080822TRA

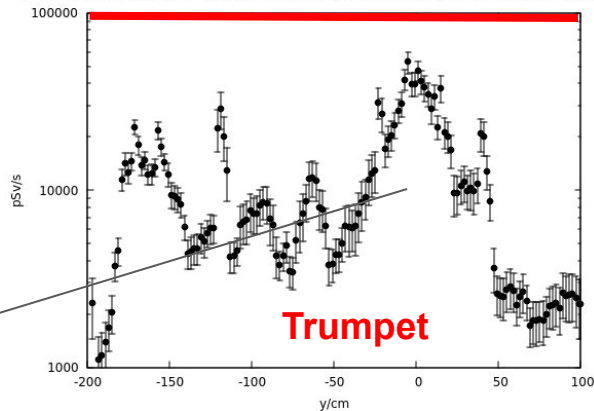


- Activation at the downstream side is low.
- Service lines may be placed at the CPS exit.

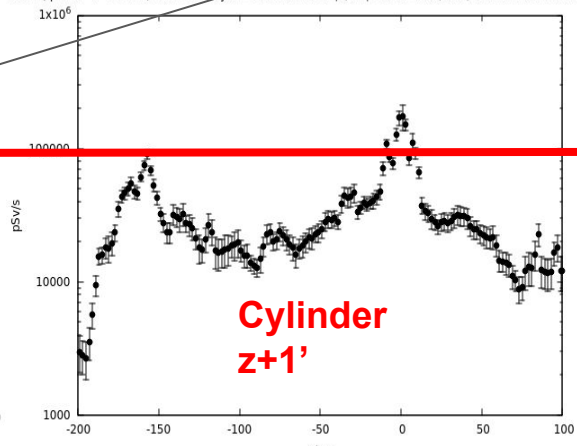
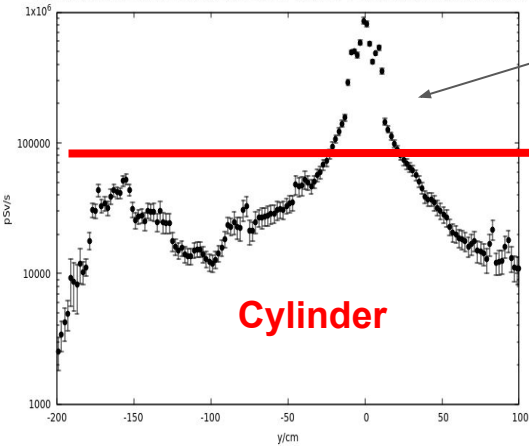
Comparison with Previous CPS model with W Cylinder; No trumpet. After 1000+1hr Dose Eq.



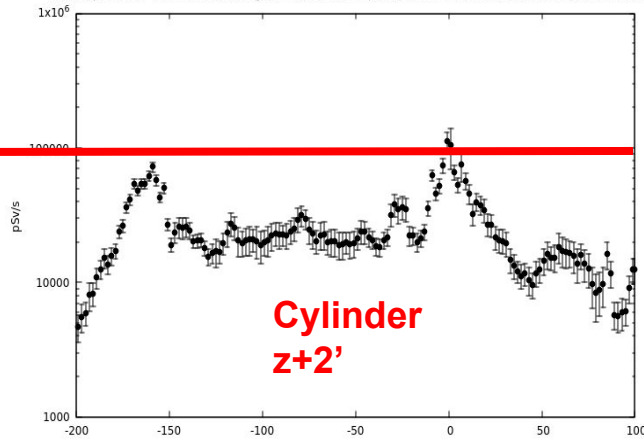
1 Hr Dose Eq downstr. CPS, 370<z/cm<400 |x/cm|<20 B=.24/.25/.22T CPSKPTTELL080822Tf



DoseEQ profile-0' 370<z/cm<400 dx dy dz = 0.05*0.05*0.2 |X/cm|<20 B=0.24/0.25/0.22T CPSKPTTELL080822 23 DoseEQ profile -1' : 400<z/cm<430 dx dy dz = 0.05*0.05*0.2 |X/cm|<20 B=0.24/0.25/0.22T CPSKPTTELL08

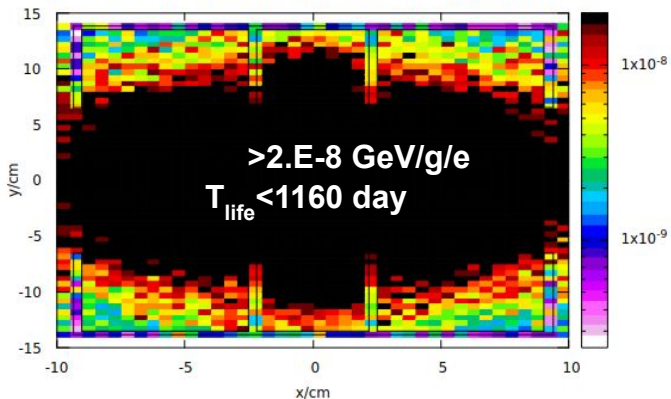


DoseEQ profile-2' : 420<z/cm<450 dx dy dz = 0.05*0.05*0.2 |X/cm|<20 B=0.24/0.25/0.22T CPSKPTTELL080822 23

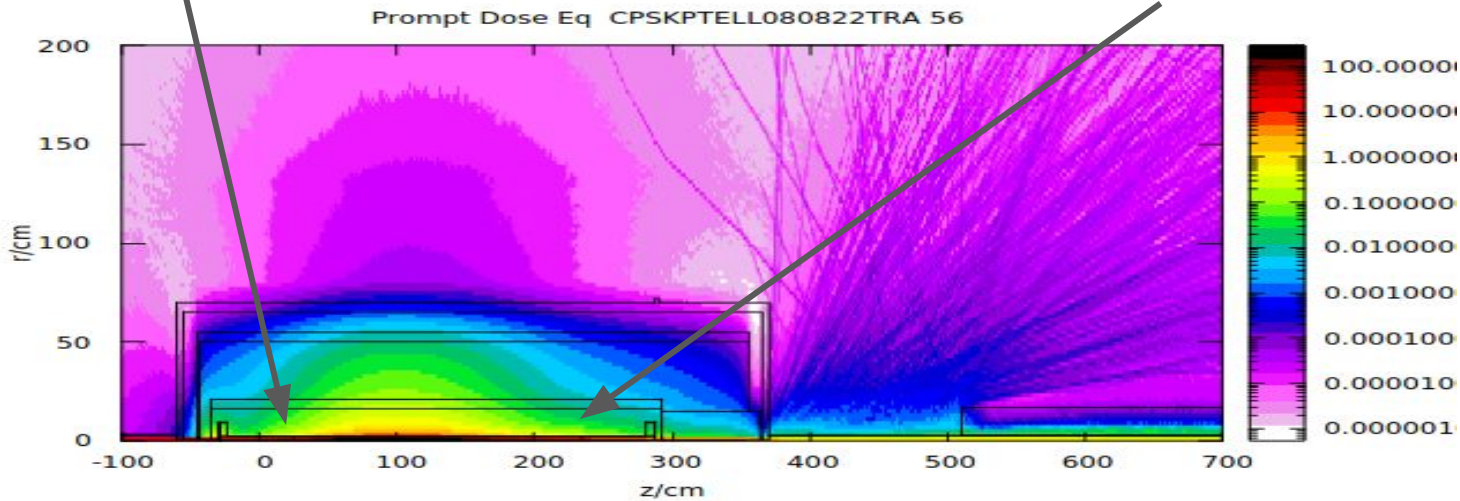
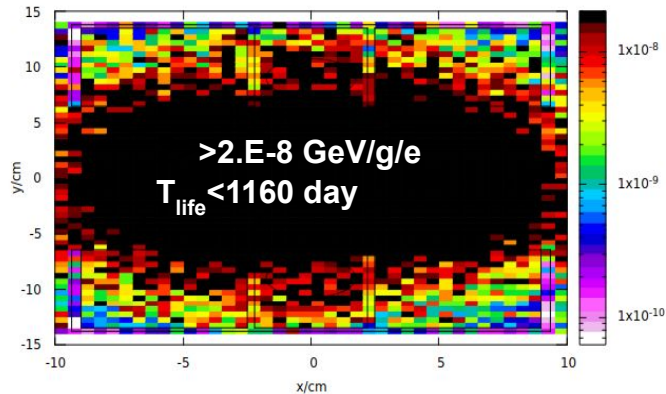


Latest CPS model. Coil Insulation lifetime and Prompt Radiation

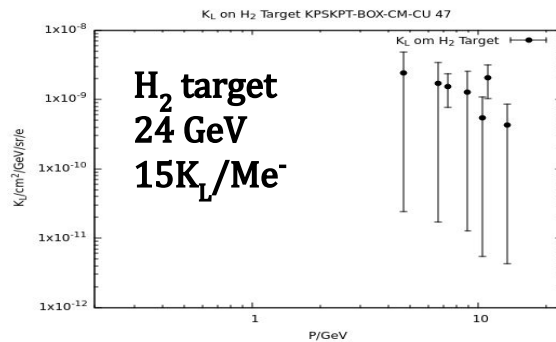
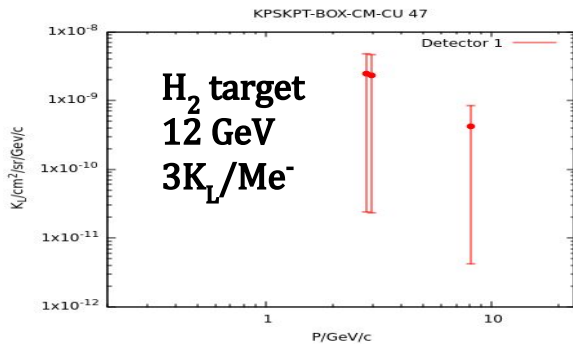
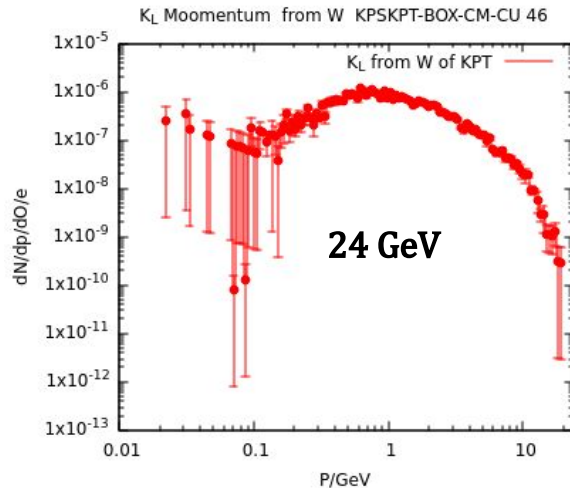
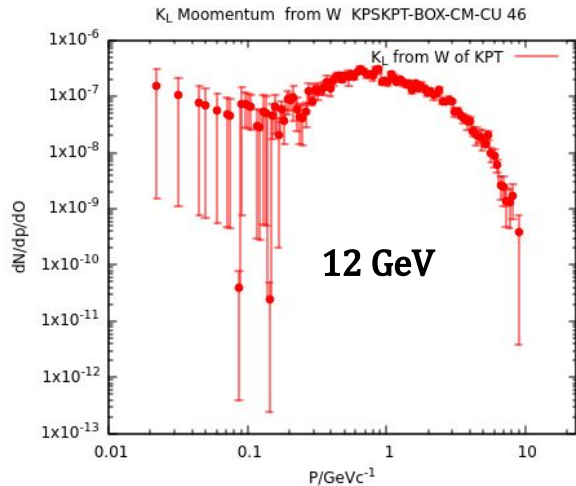
COIL 22 <z/cm<25 DOSE [GeV/g/e] Black=2.E-8 [] CPSKPTCELL080822TRA 28



COIL 234 <z/cm<237 Black=2.E-8 CPSKPTCELL080822TRA 29



K-long yield vs beam energy. Week of calculations.



The yield of K-longs
At 24 GeV
Is ~5 times higher

Next Step in Temperature Calculations.