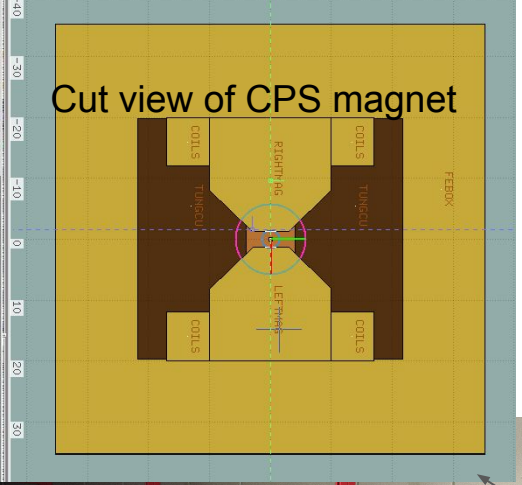
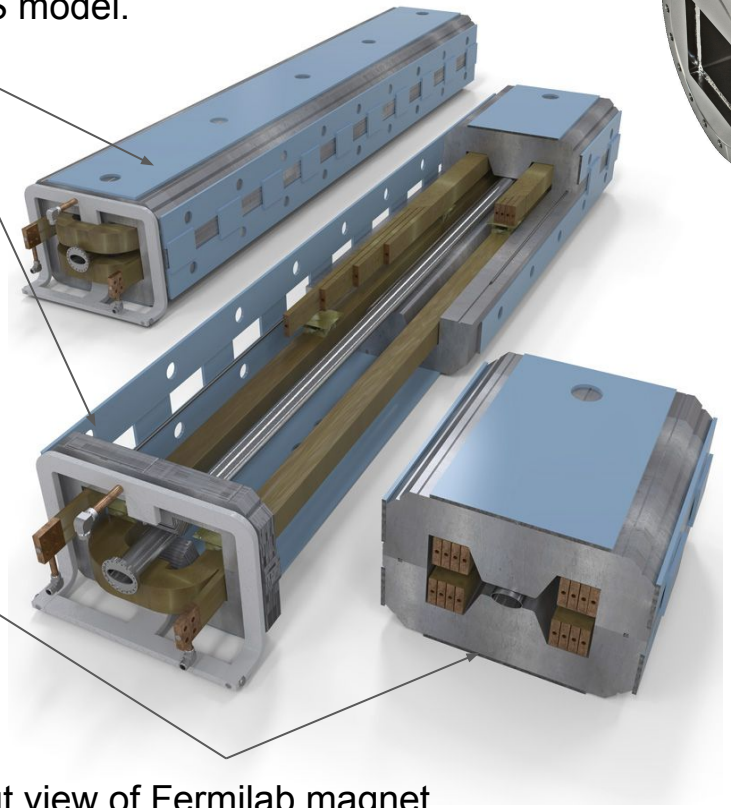
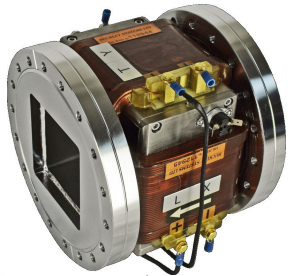


Fermilab magnet ~ 4-5 m long.
As beam pipe goes through ->
We may insert a copper pieces
Similar to that of CPS model.

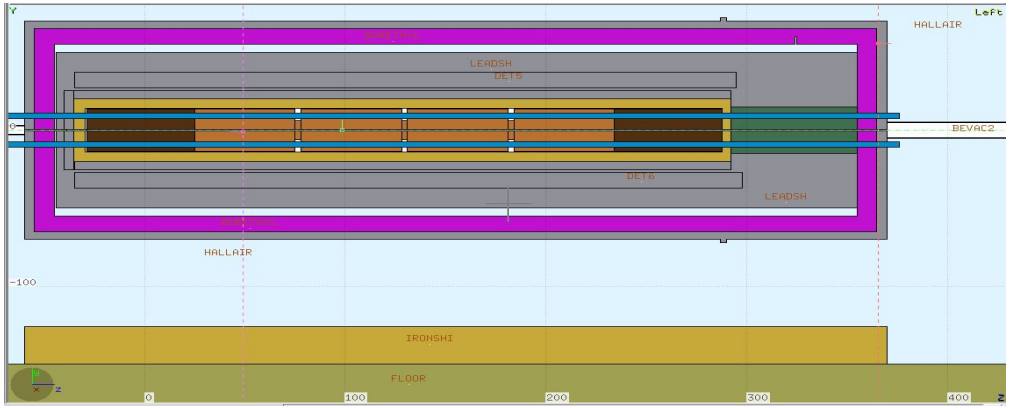


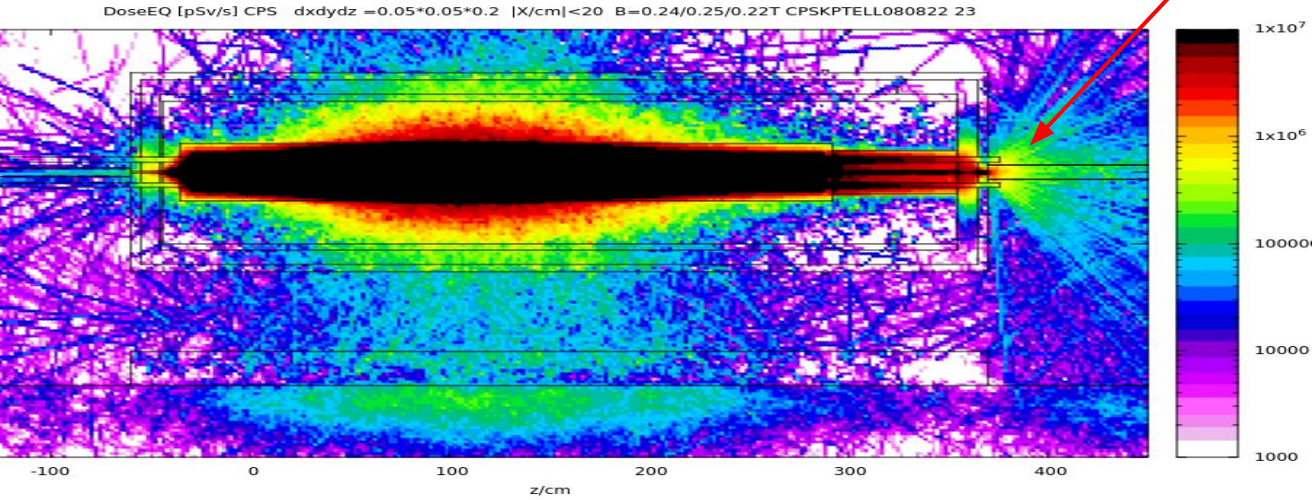


Steering magnet

Cut view of Fermilab magnet.
Looks similar.

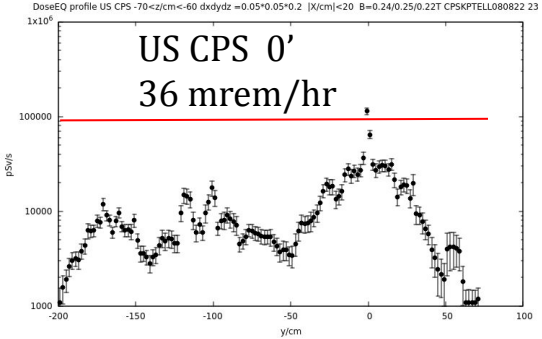
Almost Final Model. All W-pwdr replaced with Lead, except of DS. **High Dose Eq**. at CPS exit.

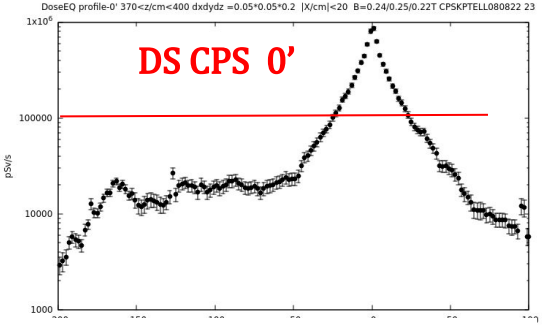


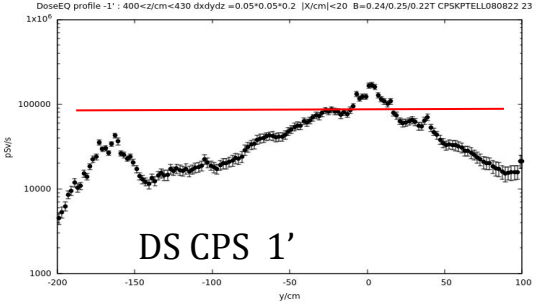


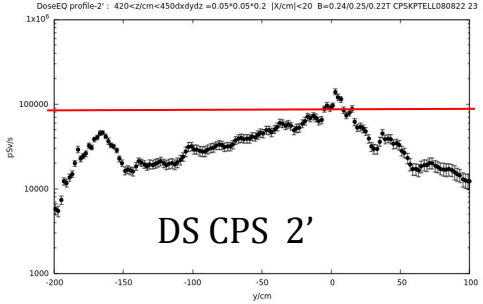
- Look like there is a point-like Source of radiation in the end of beam channel.
  Dose Eq.=~8.E+5 pSv/s
  =~300 mrem/hr
- Add Cyl. Shielding?

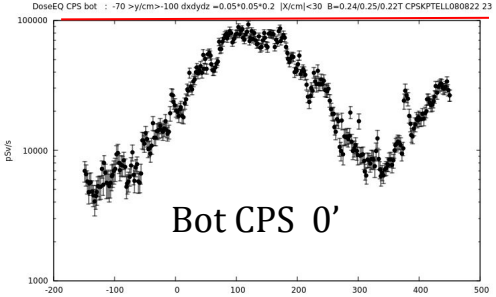
Almost Final Model. Dose Eq. at various distances form the CPS Exit.

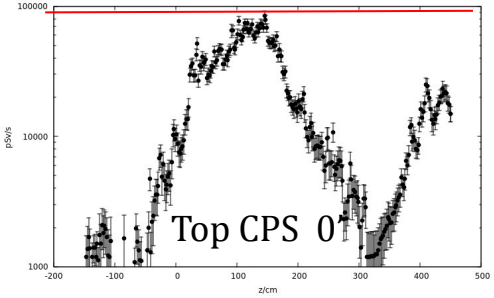




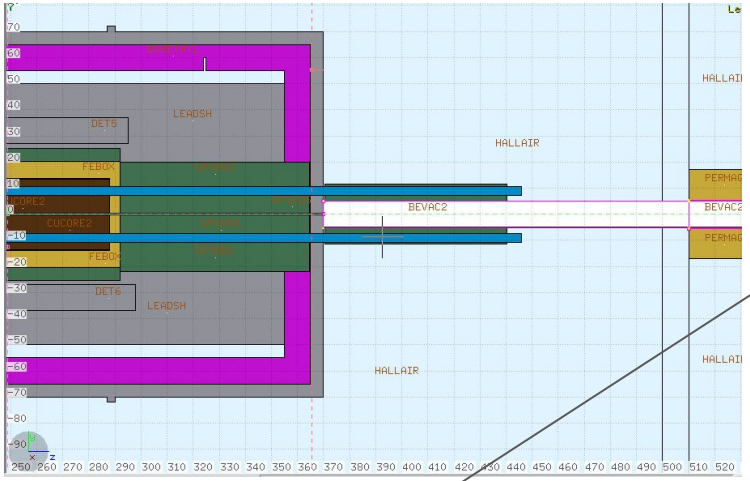


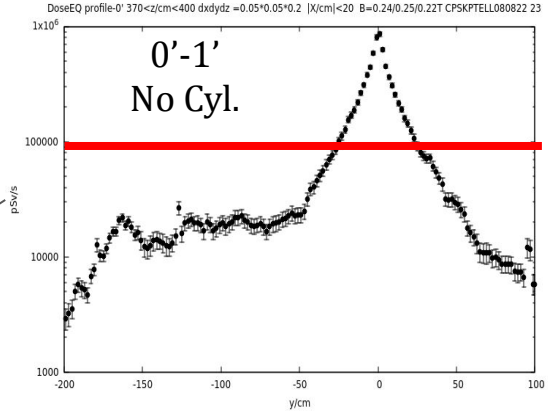


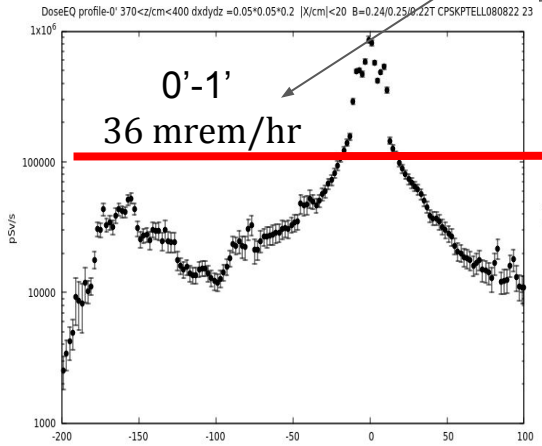


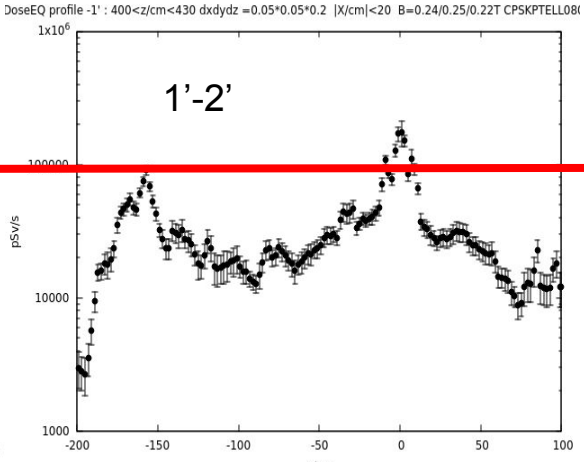


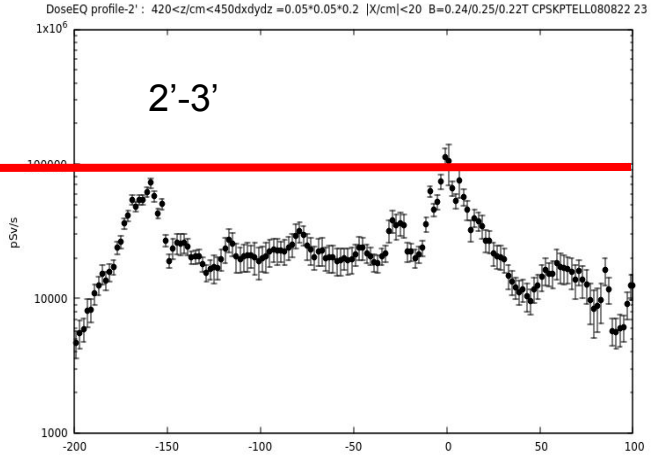
Almost Final model+tail. After 1Hr Dose Eq. Effect of cylindrical Tail at CPS exit.



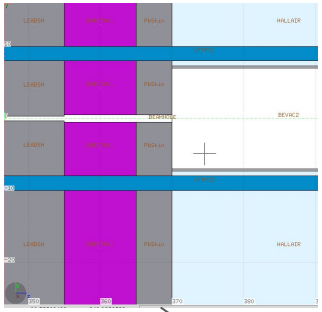


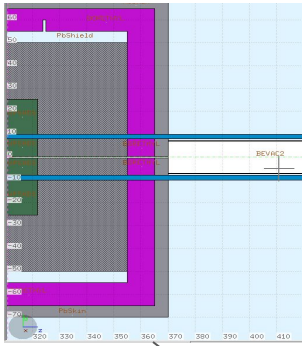


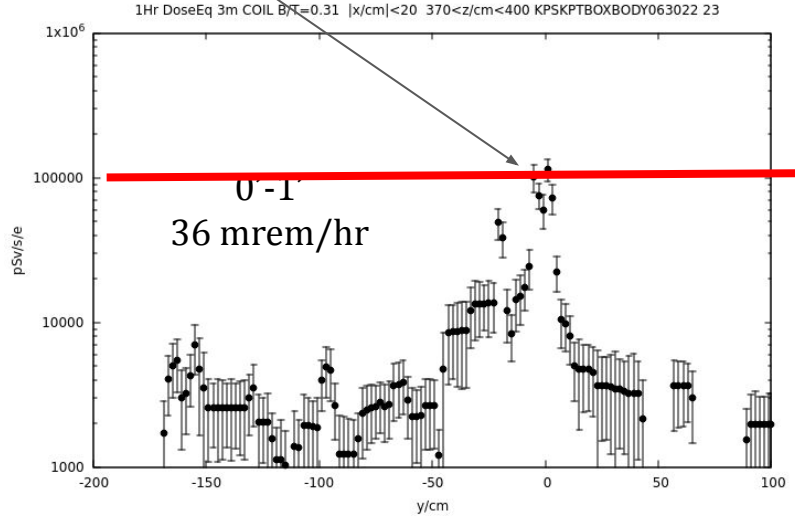


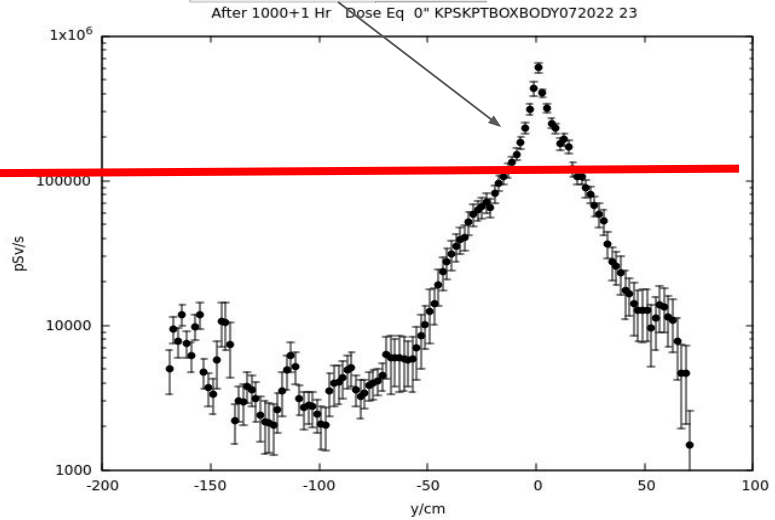


Effect of wider beam channel at CPS exit. Not final model. After 1Hr Dose Eq.



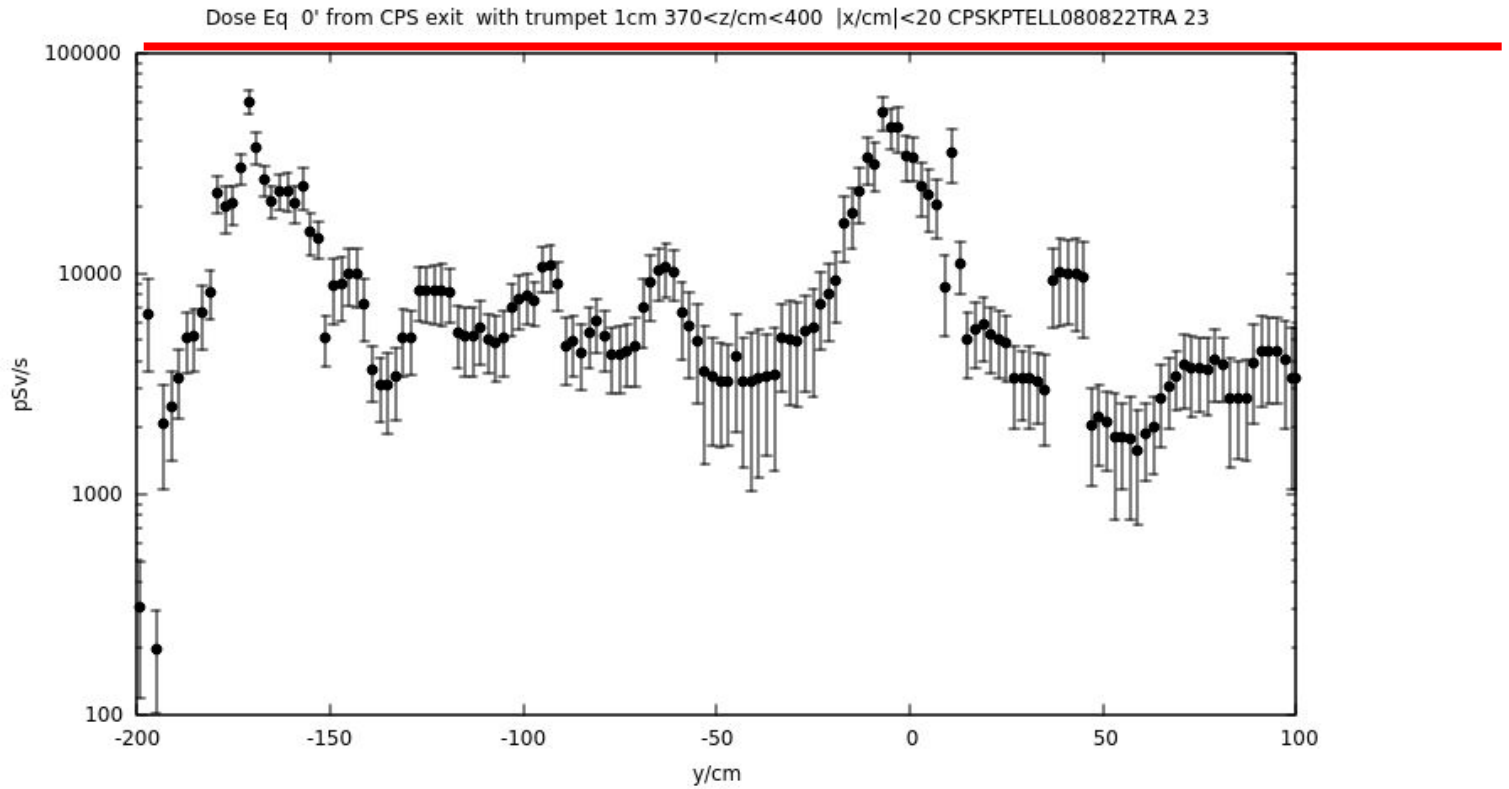




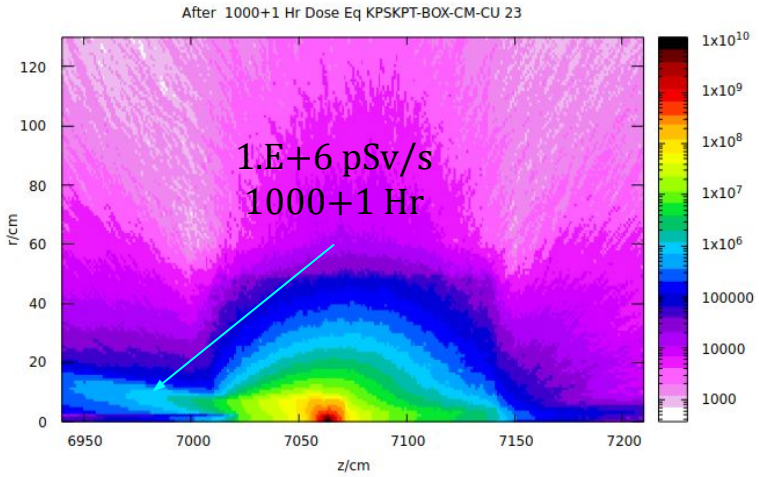


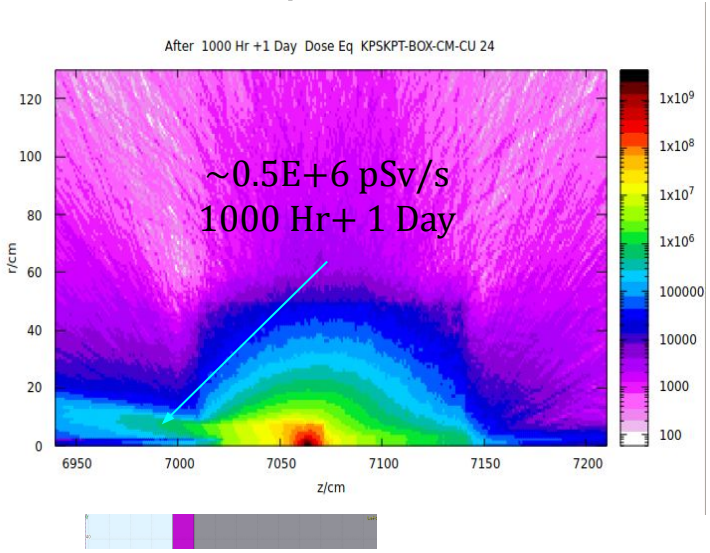
- Positive Effect of Channel transition needs to be dowblechecked with final model.

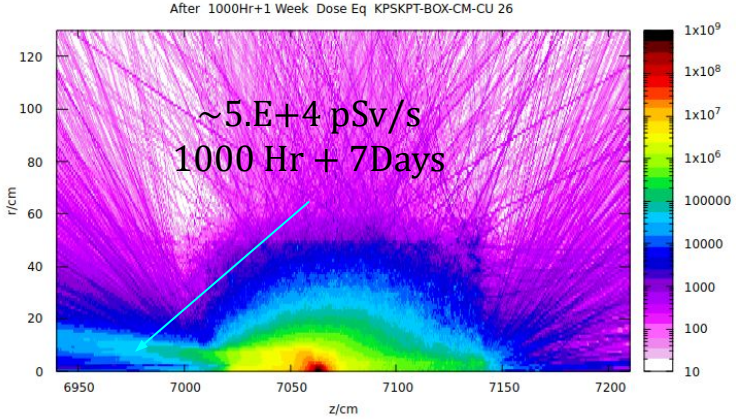
Effect of wider beam channel at CPS exit. **Final model.** After THP Dose Eq.

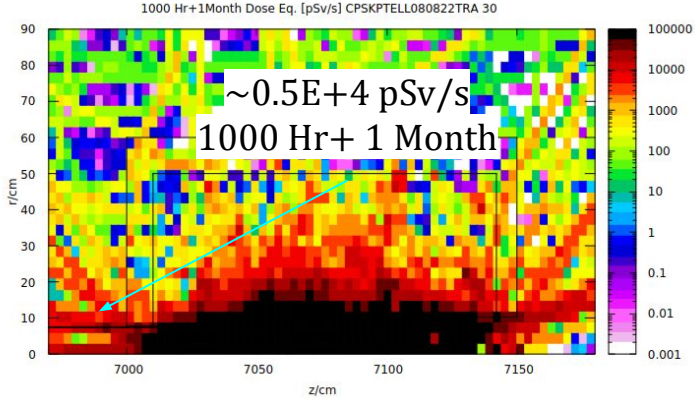


Dose Eq. at KPT. Dose 10^5 pSv/s = 36 mrem/hr.



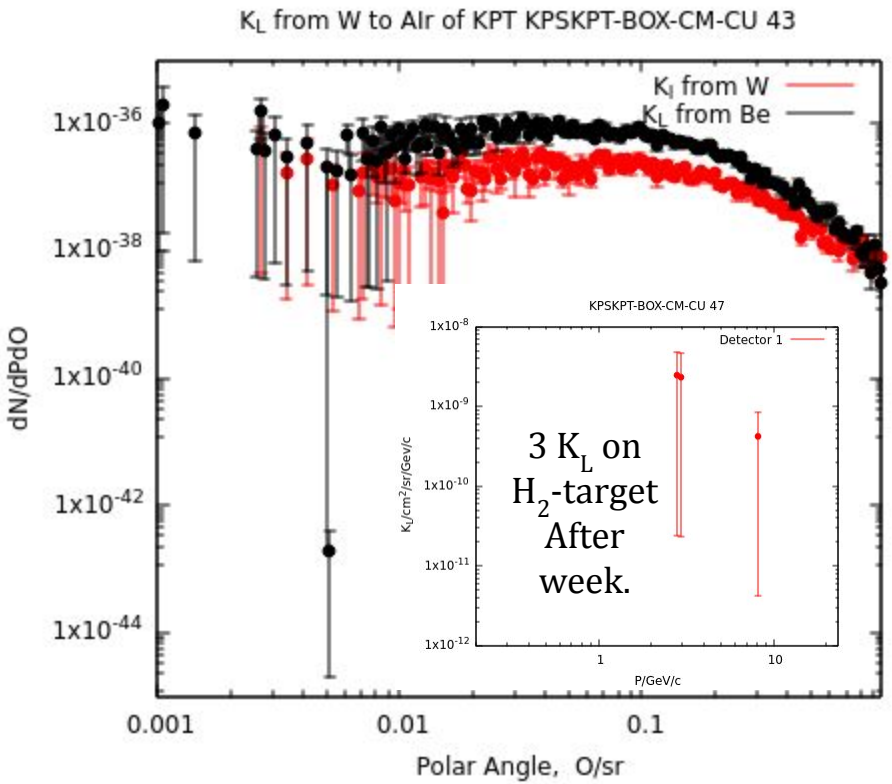


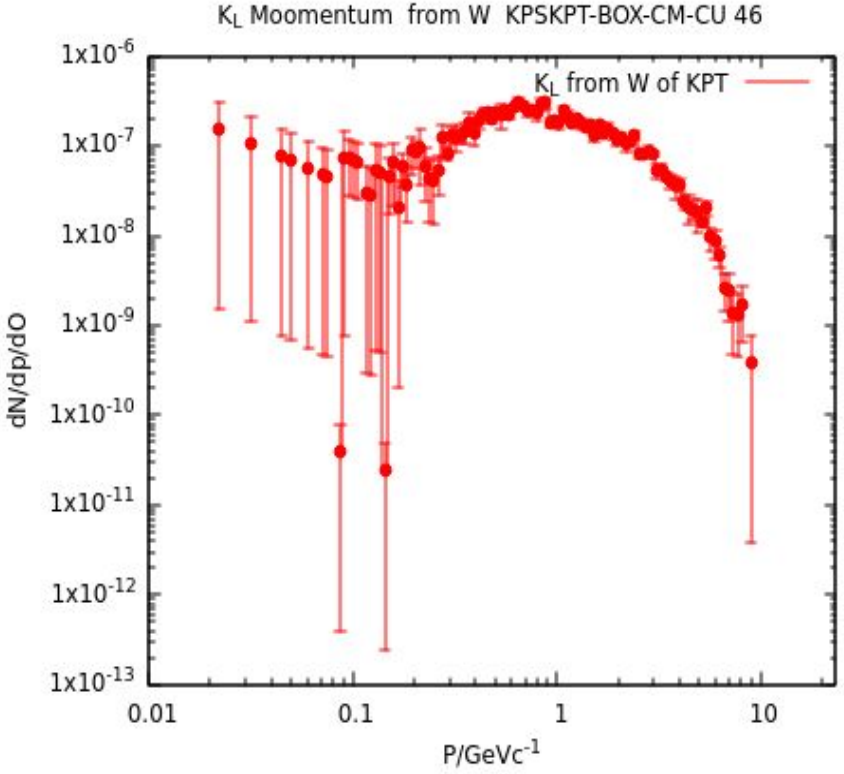




K-Long from KPT and on H2-Target at 12 GeV. To compare with 24 GeV.

10^6 primary electrons. Acceptance of H_2 target = 0.00125 sr.





THE END