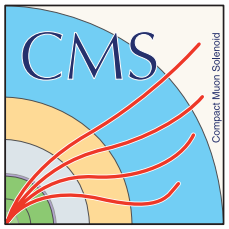


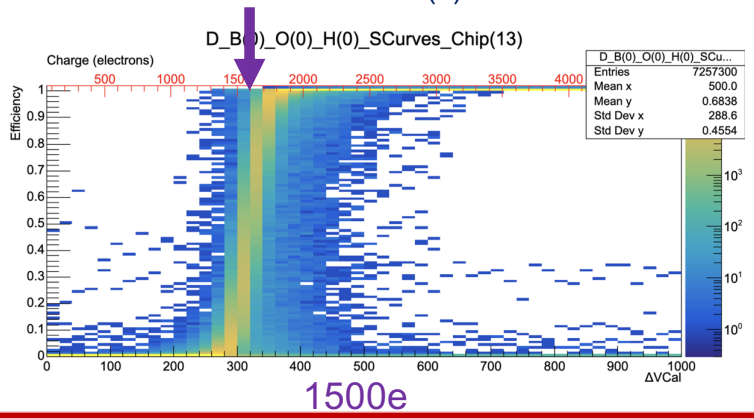
RH0015 Comparison and RH0016 Tuning Notes

Update from UIC

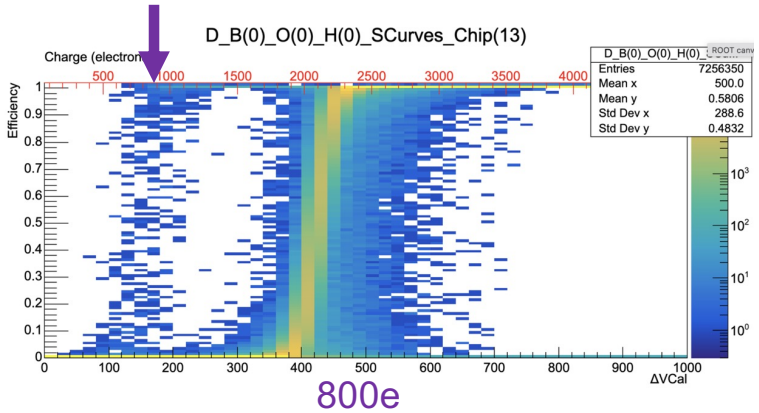
RH16 - CROC 1x2 sensor module (RH15 values)

- Ph2_ACD v4.14, Firmware v4-6 (OSU GUI docker image)
- Chiller and Peltier set to 5C
- LV: 1.97V 4.5A
- HV: -60V, -0.033 (~ -0.35) uA
- Chip12 and 13 were at ~8C (27) and ~10C (30) (NTC) respectively
  - Temperatures decreased considerably when I put thermal paste (thermal sheet)

- Needs to be tuned again –
  - GDAC value after 1500e is too low to be in GDAC scan range for chip 13 (ThrStart was 405, Matt changed it to 380))
    - 1500e – GDAC 415
    - 1200e – GDAC 405
    - 1000e – GDAC 433 (*the actual global GDAC is less than min limit, so it is set to a random(?) value in the scan range*)
    - 800e – GDAC 417 (?)

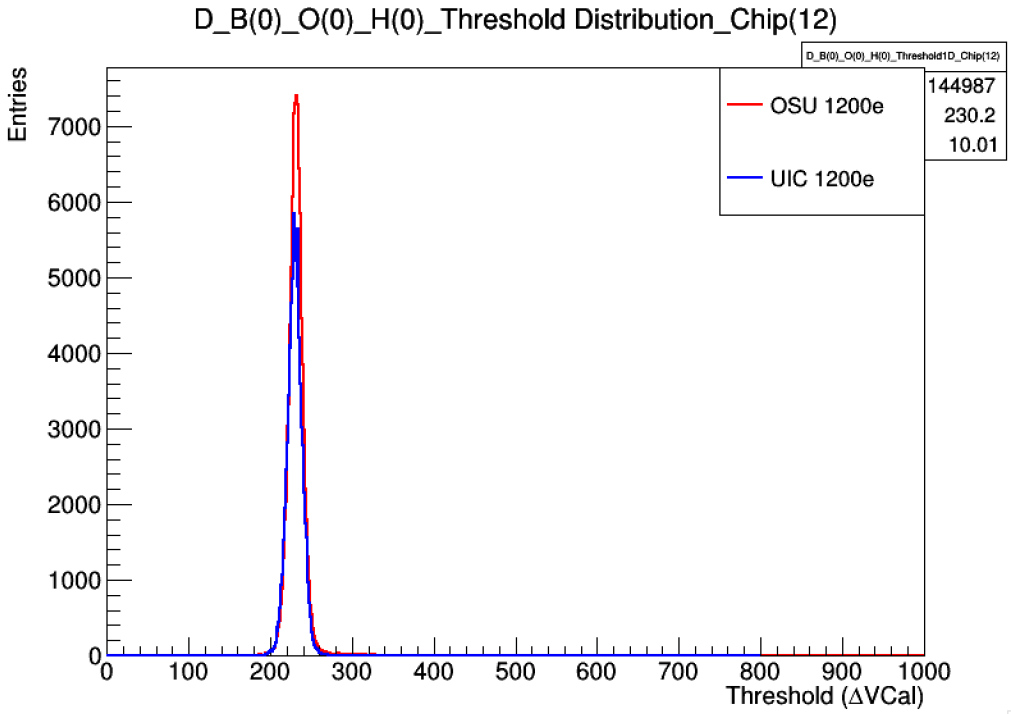


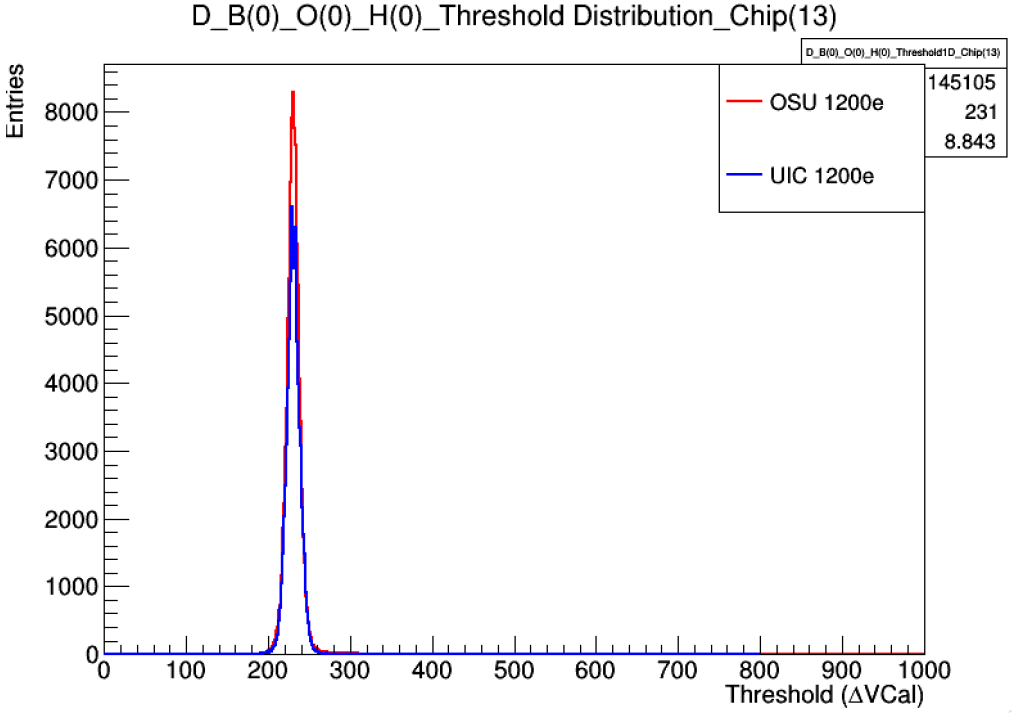
1500e



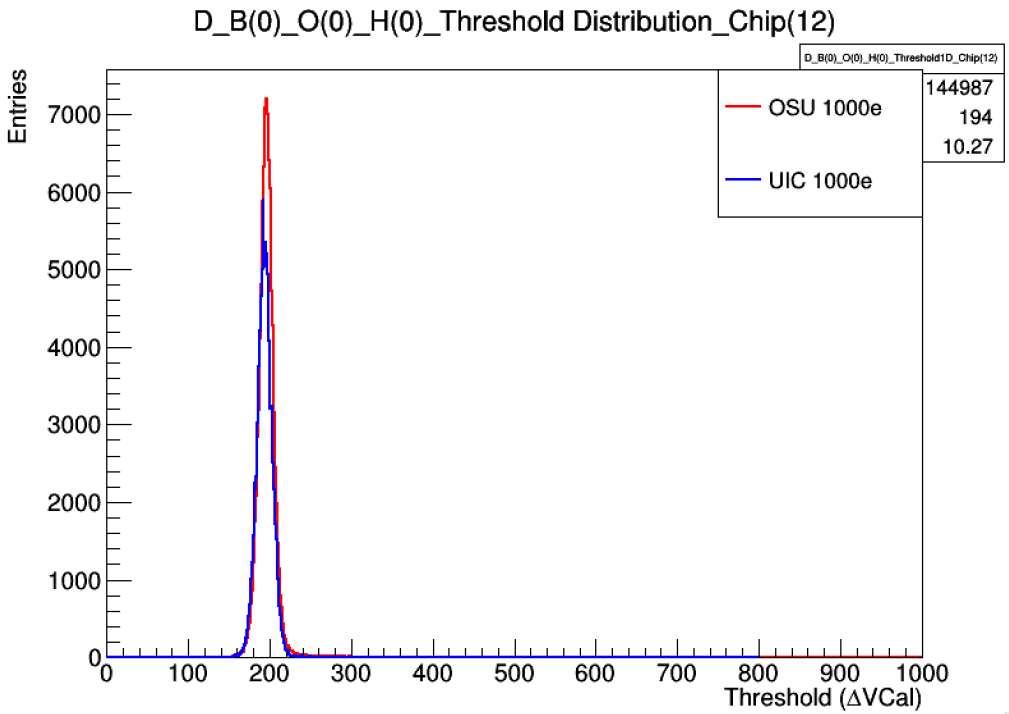
800e

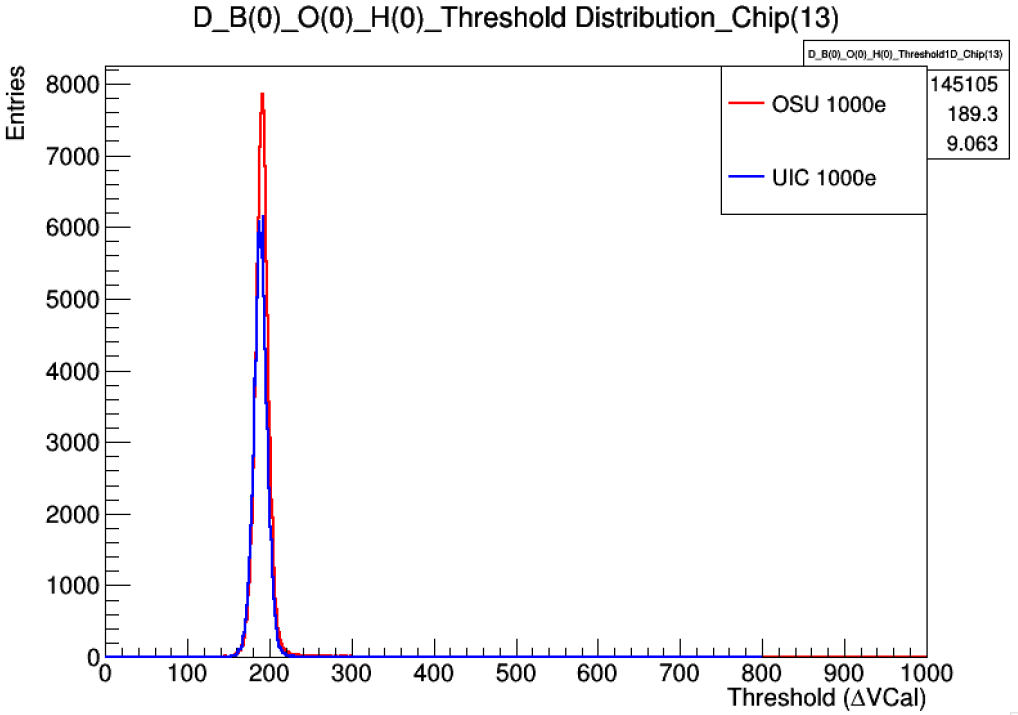
RH15 - Threshold Adjustment/Equalization/Scurve (1200e)



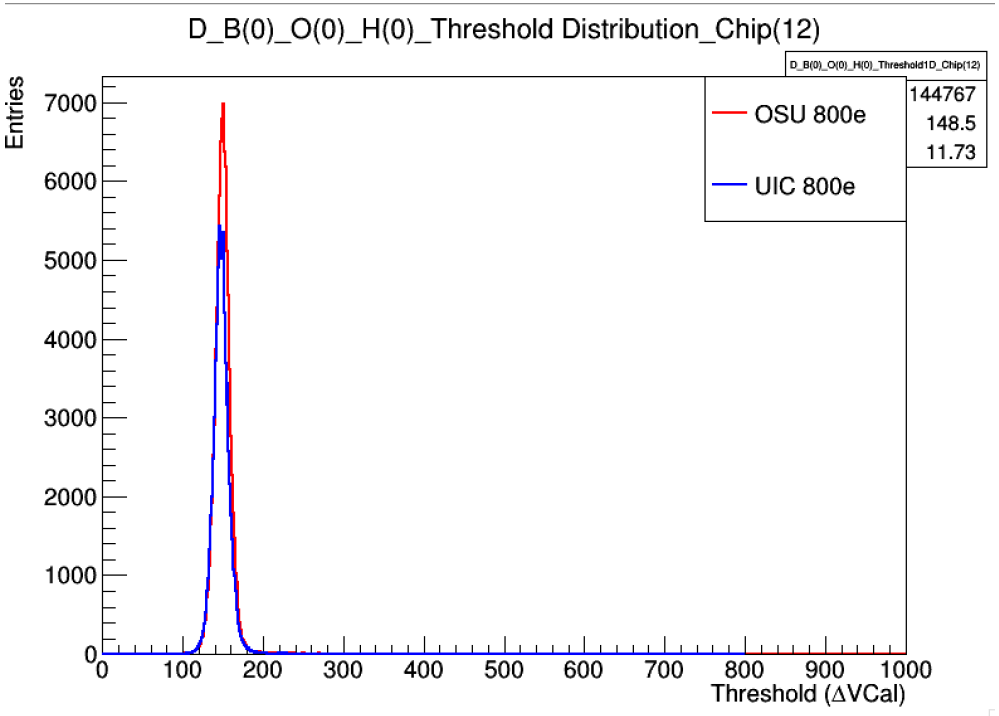


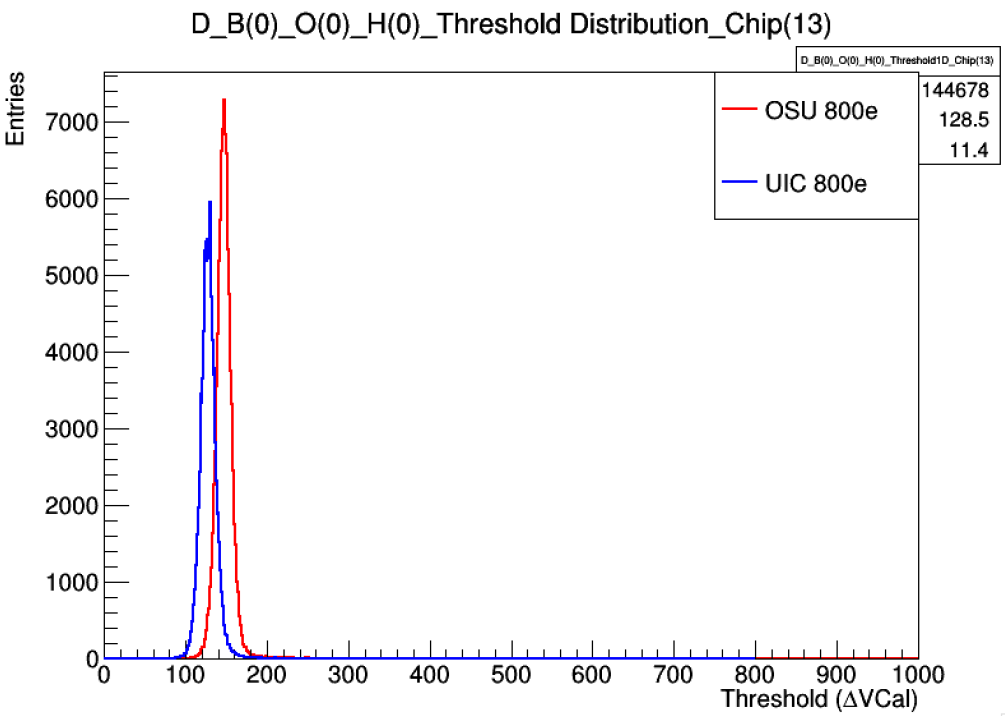
RH15 - Threshold Adjustment/Equalization/Scurve (1000e)



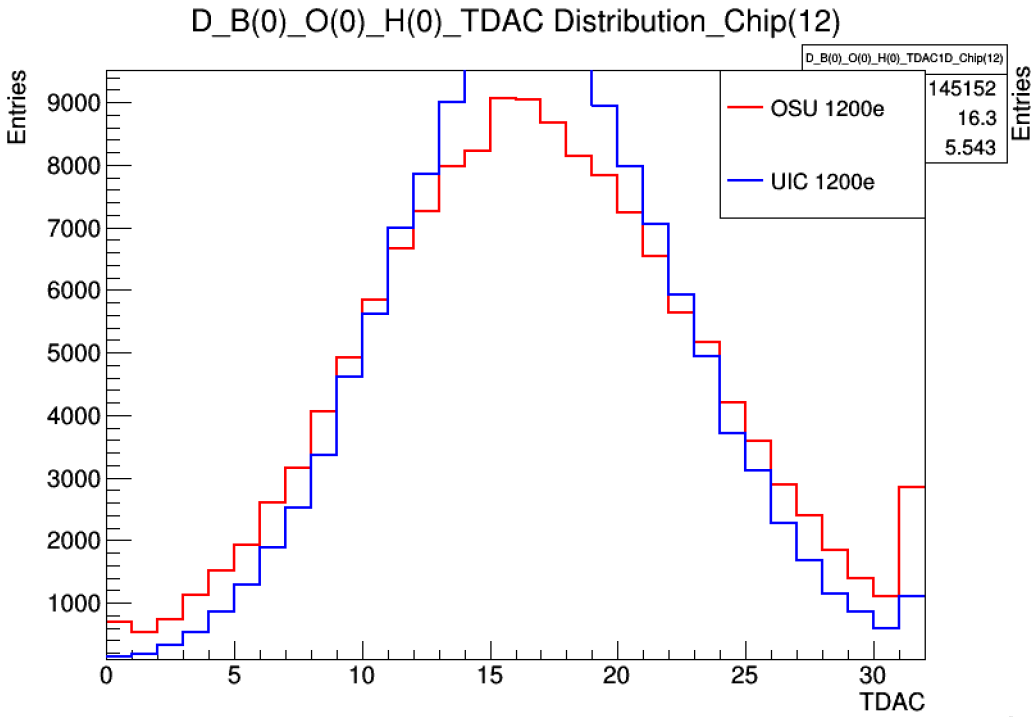


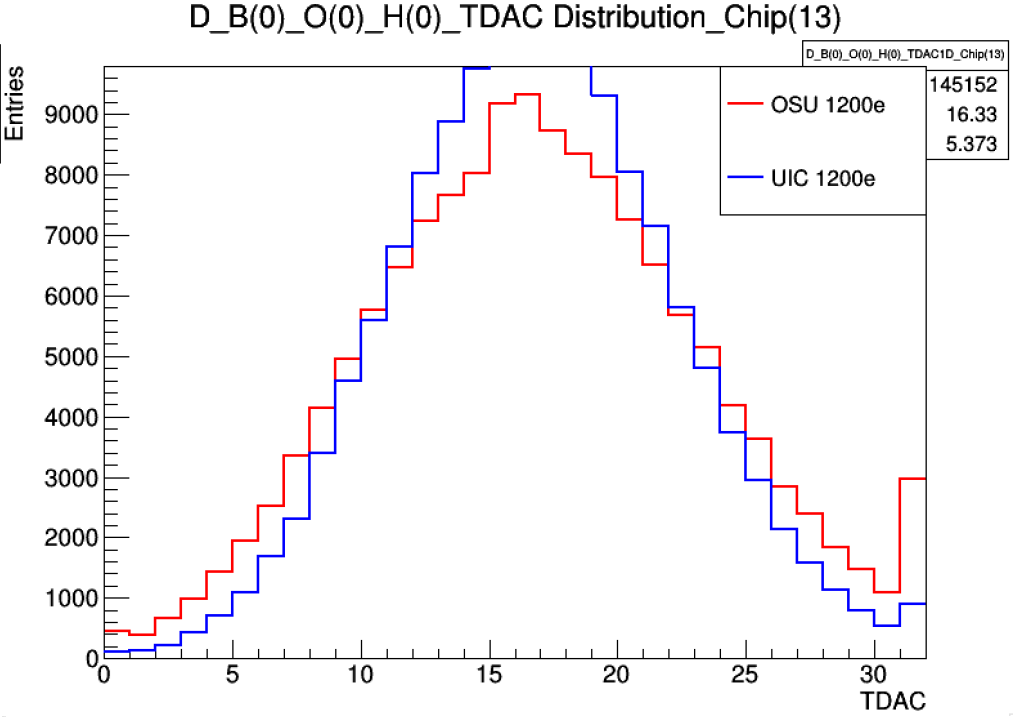
RH15 - Threshold Adjustment/Equalization/Scurve (800e)



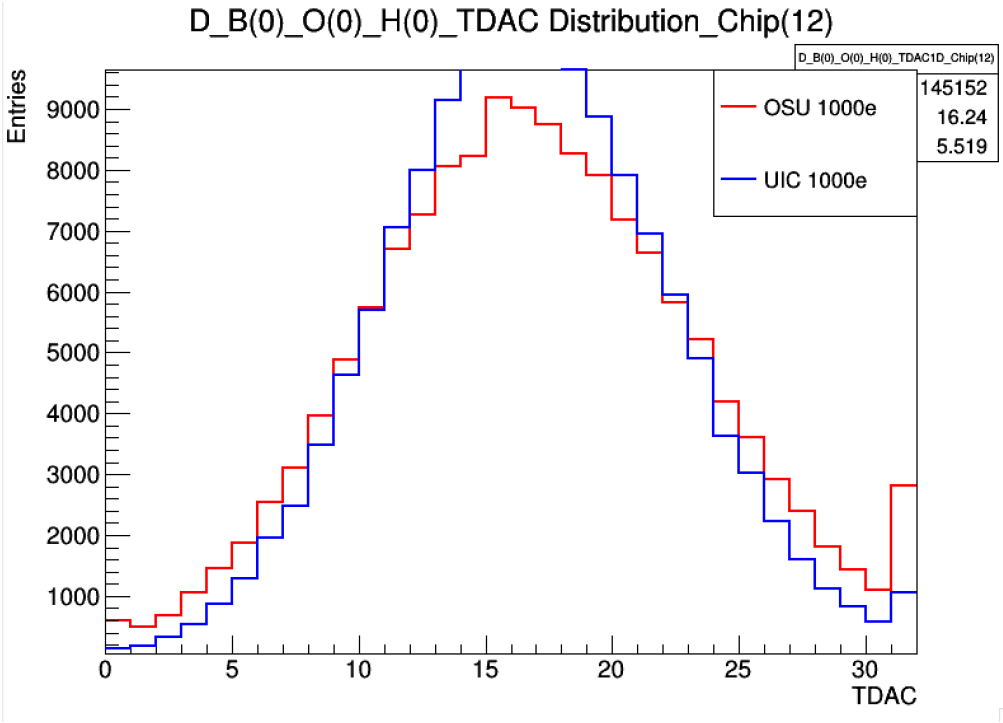


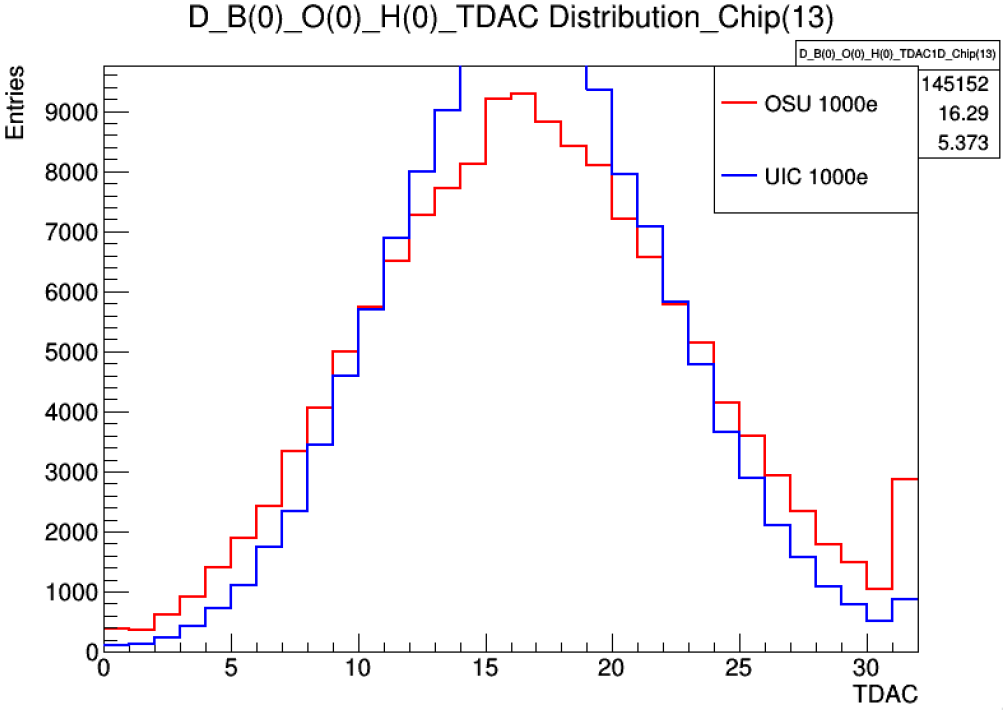
RH15 - Threshold Equalization TDAC 1D (1200e)



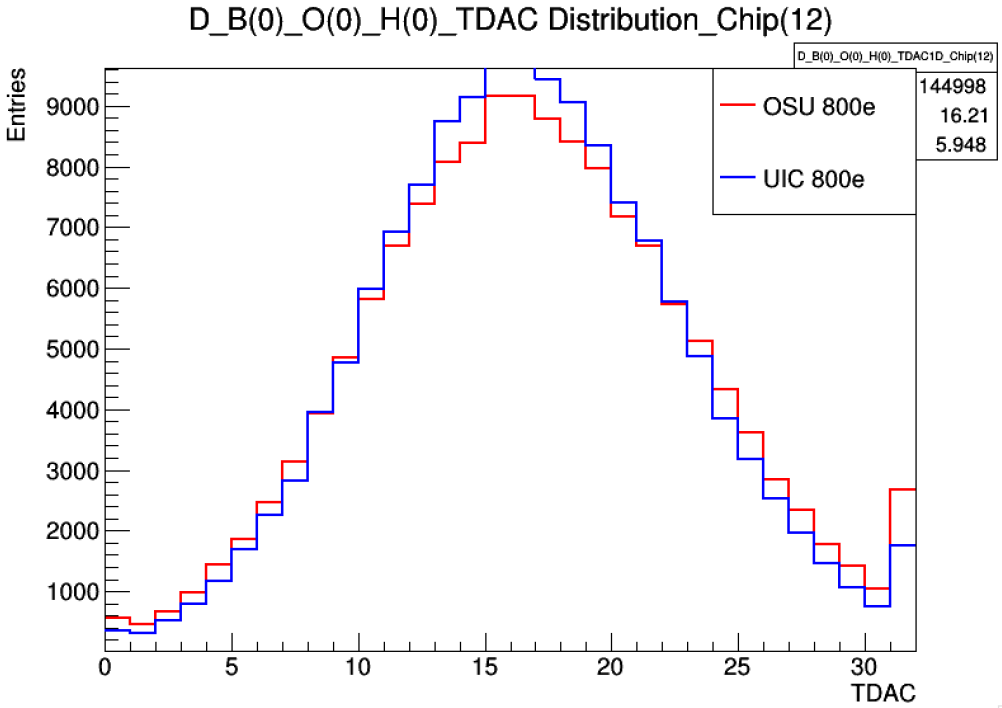


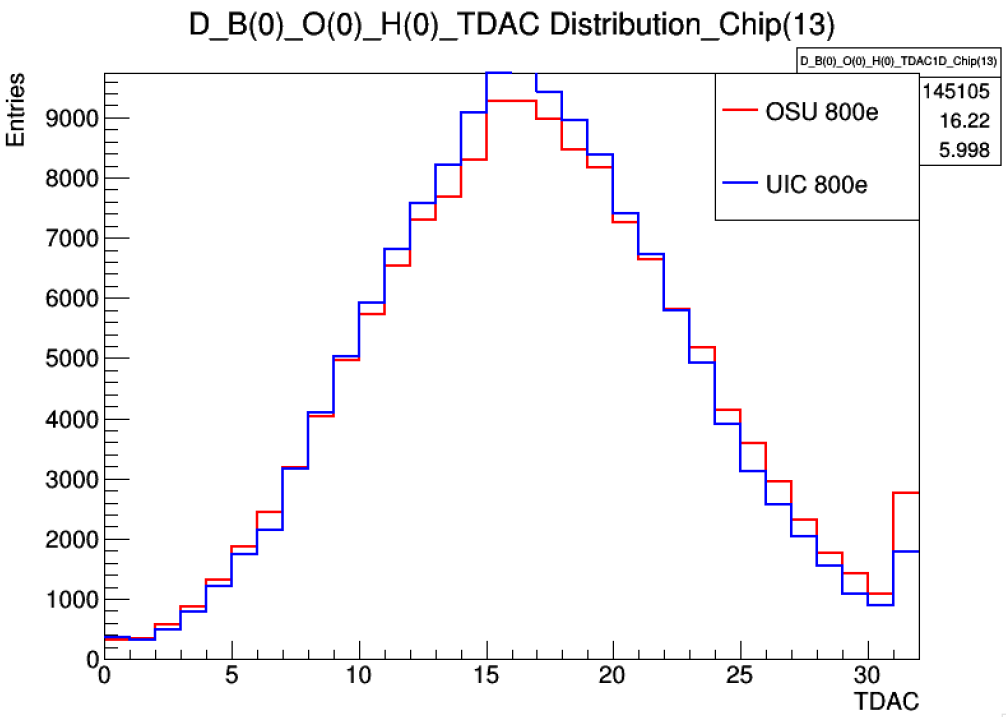
RH15 - Threshold Equalization TDAC 1D (1000e)



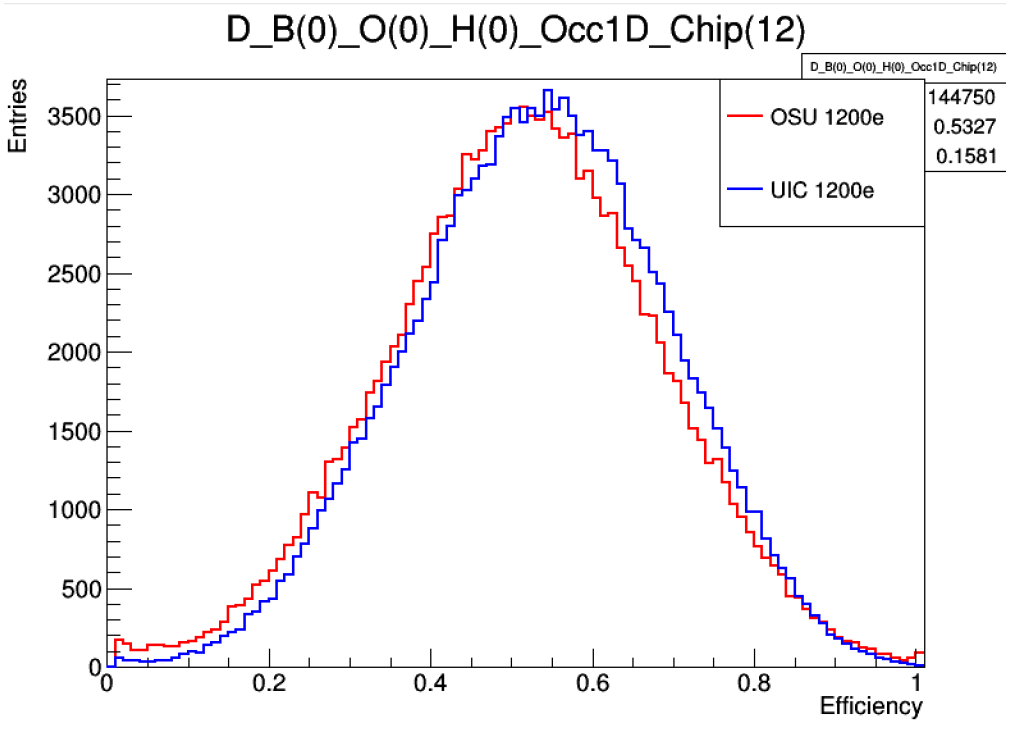


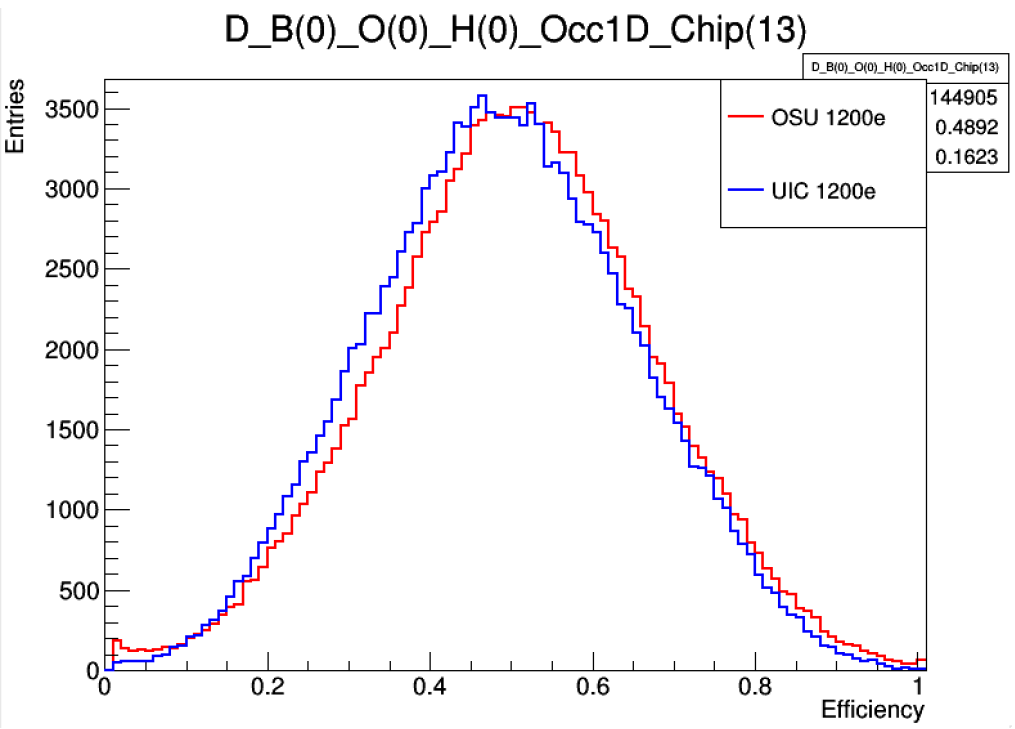
RH15 - Threshold Equalization TDAC 1D (800e)



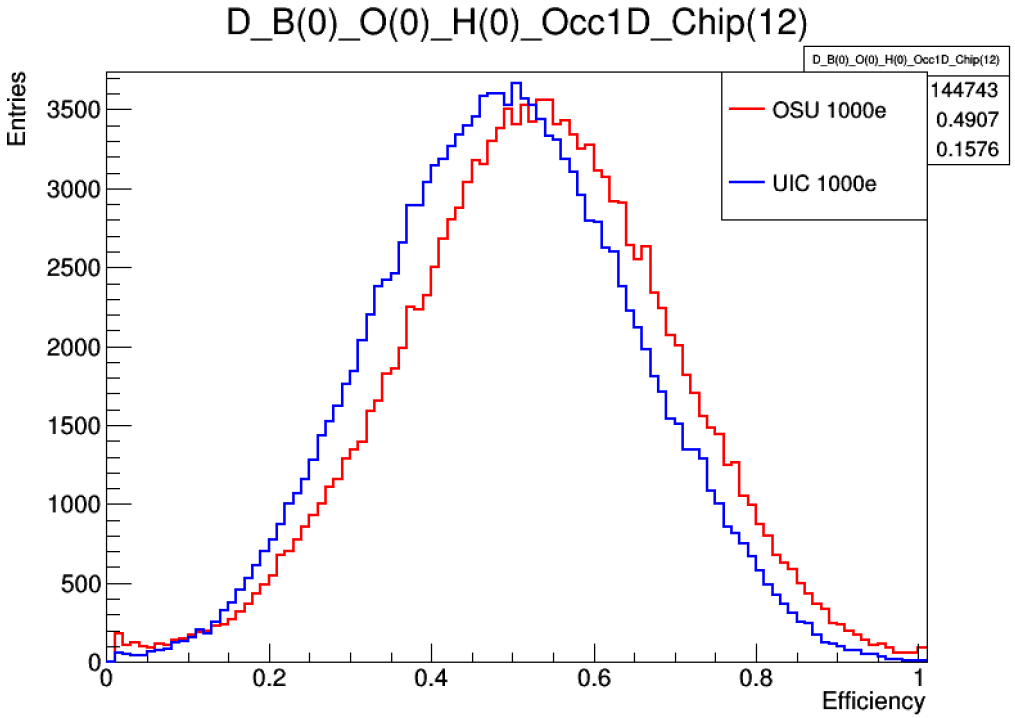


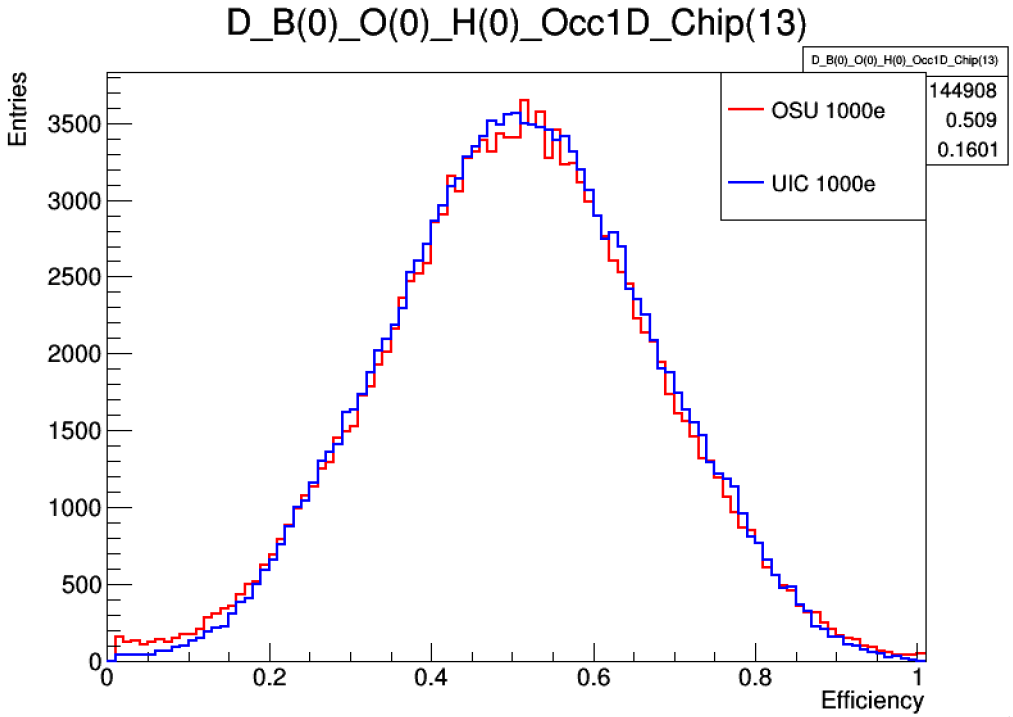
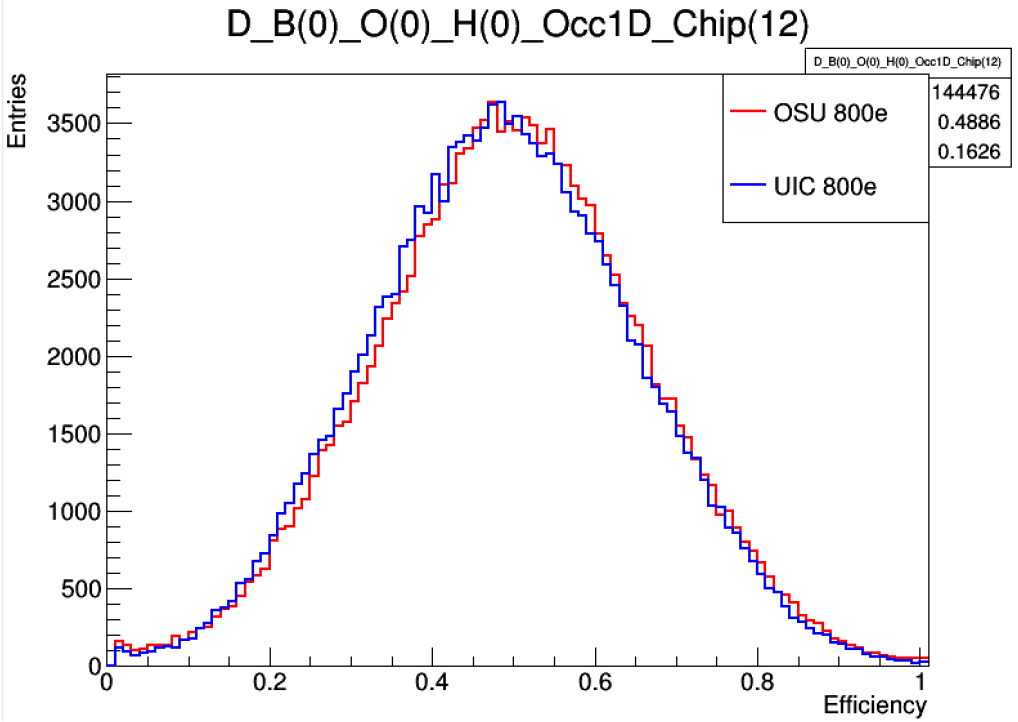
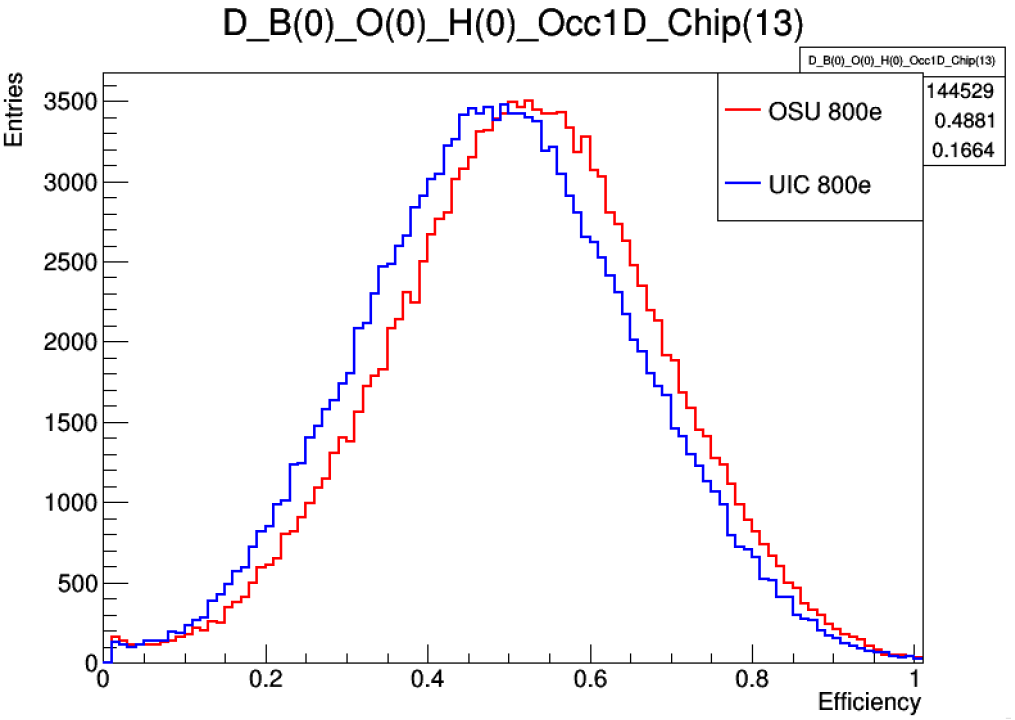
RH15 - Threshold Equalization Occ 1D (1200e)





RH15 - Threshold Equalization Occ 1D (1000e)





RH15 - Threshold Equalization Occ 1D (800e)