

TCoin Reference Times Update 2023/11/30

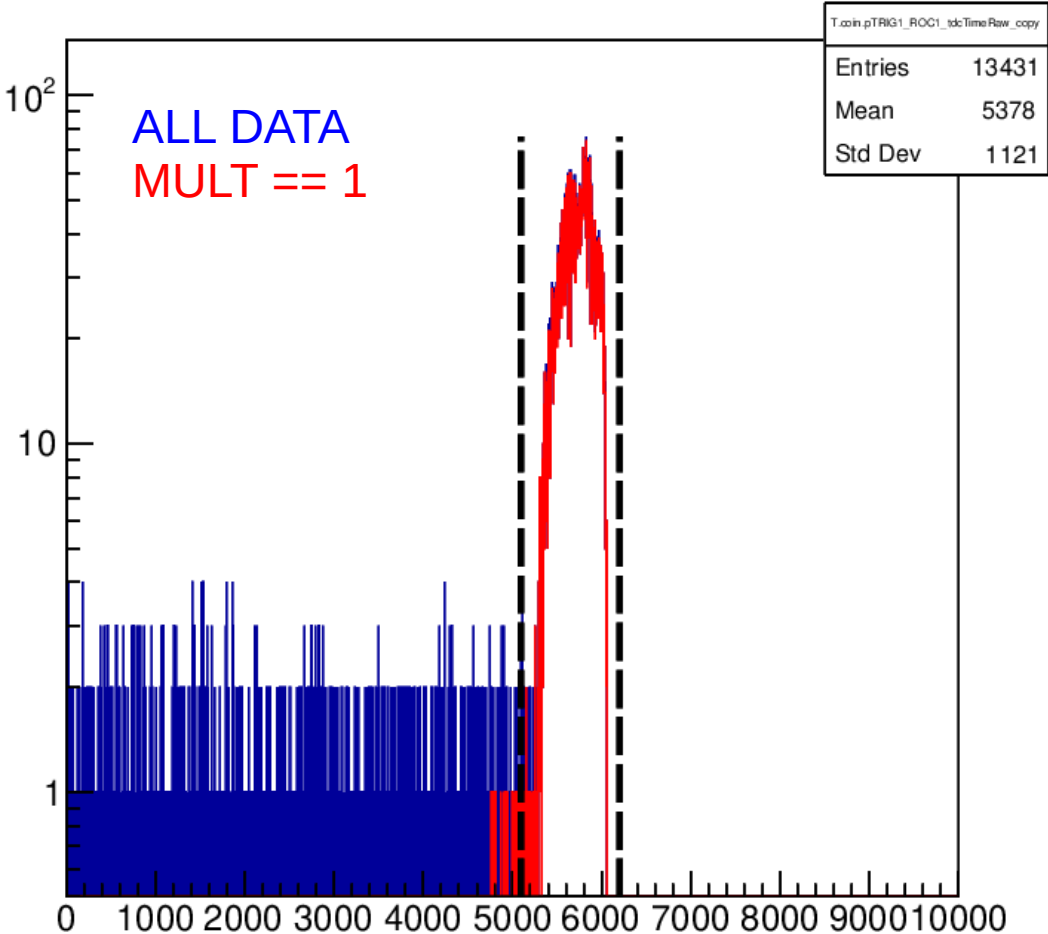
Been working on reference time study to determine the proper cuts for pionLT data.

Goal is to improve the coin event selection in hcana.

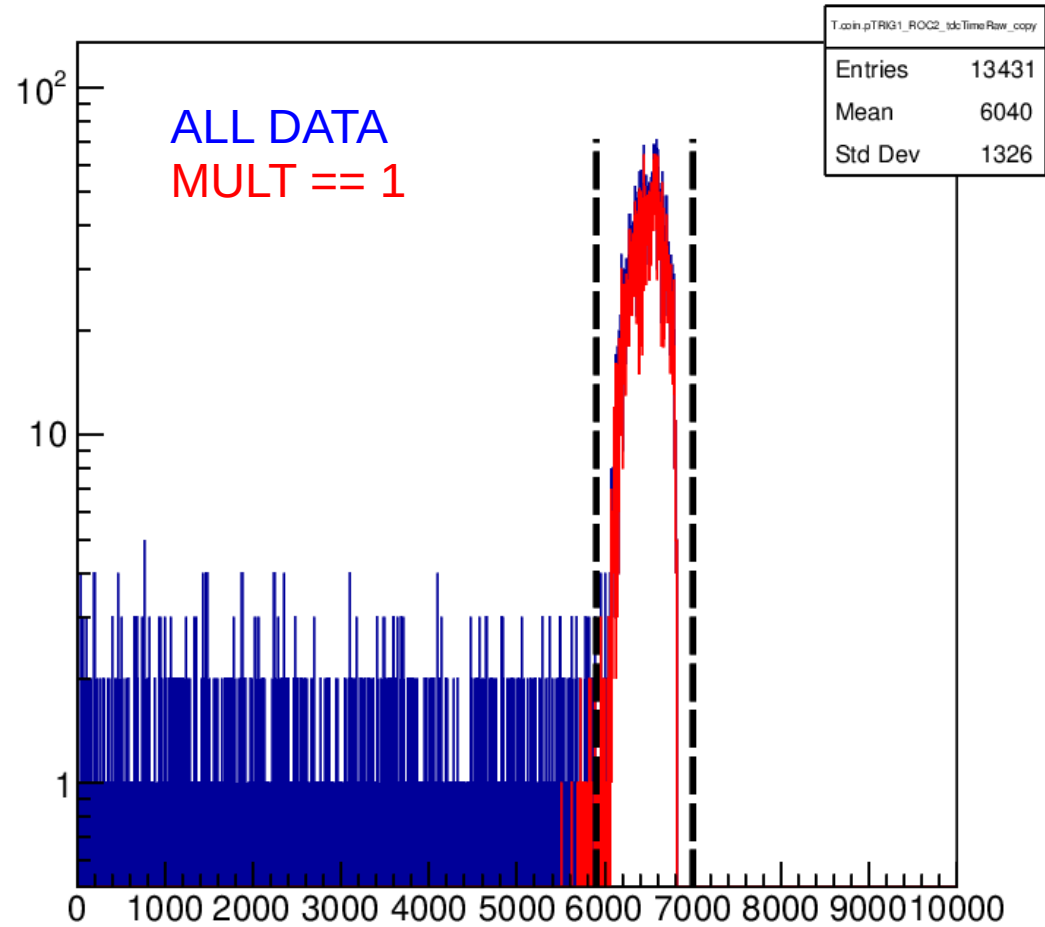
I have selected some cut values, need 2 sets, one for HMS elReal x SHMS 3/4 trigger (pTrig5) one for HMS 3/4 x SHMS 3/4 trigger (pTrig6)

EIReal (14039)

T.coin.pTRIG1_ROC1_tdcTimeRaw

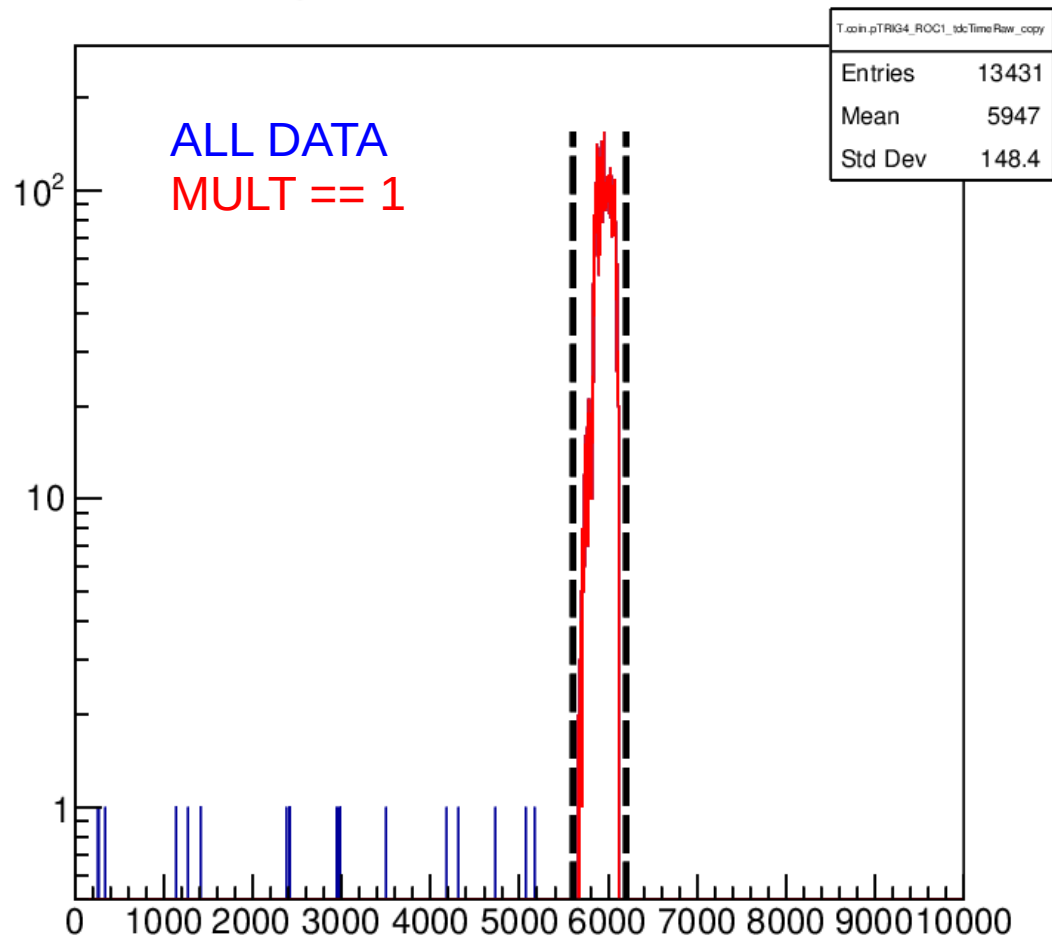


T.coin.pTRIG1_ROC2_tdcTimeRaw

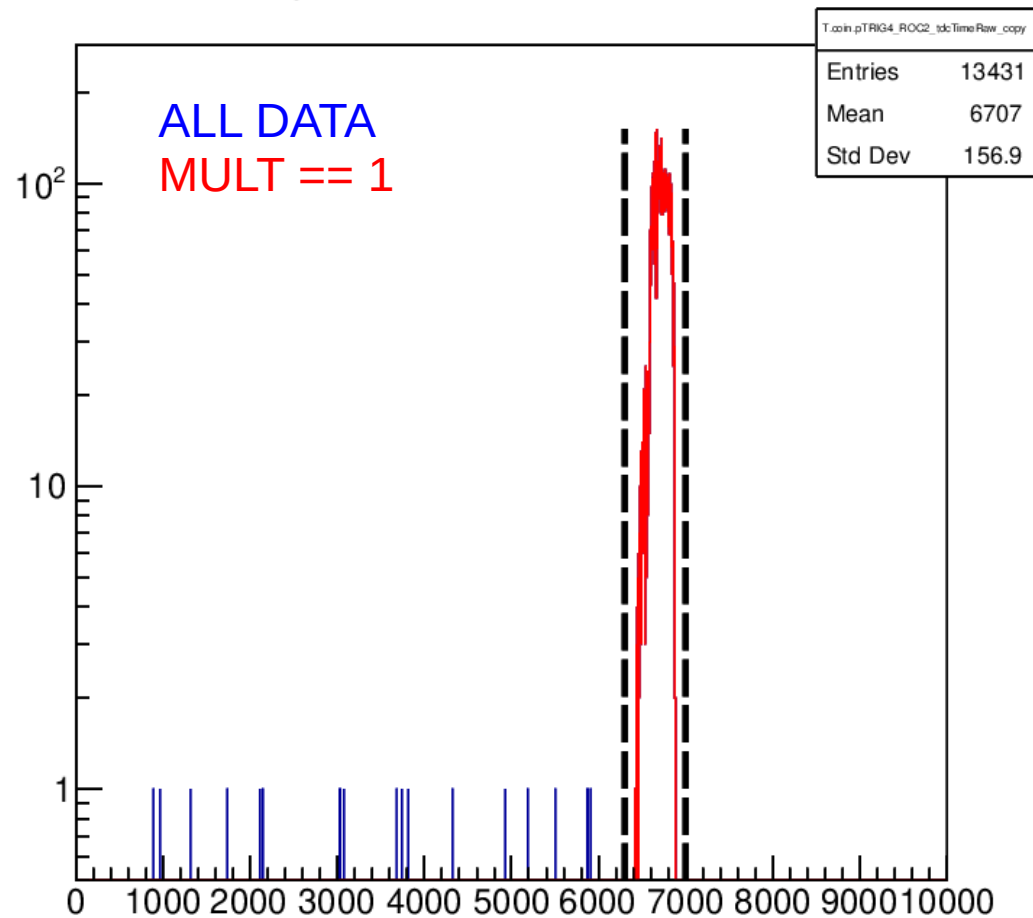


EIReal (14039)

T.coin.pTRIG4_ROC1_tdcTimeRaw



T.coin.pTRIG4_ROC2_tdcTimeRaw

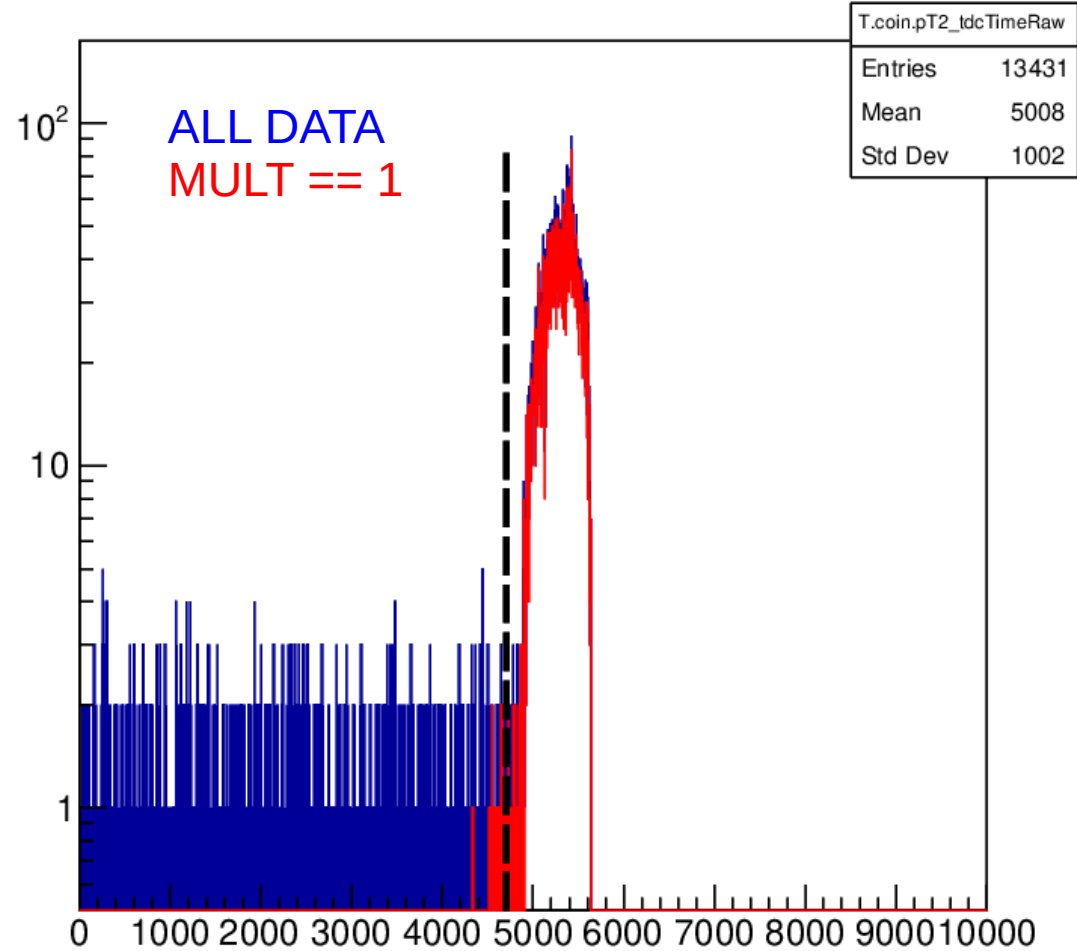


ElReal (14039)

T.coin.pT2_tdcTimeRaw

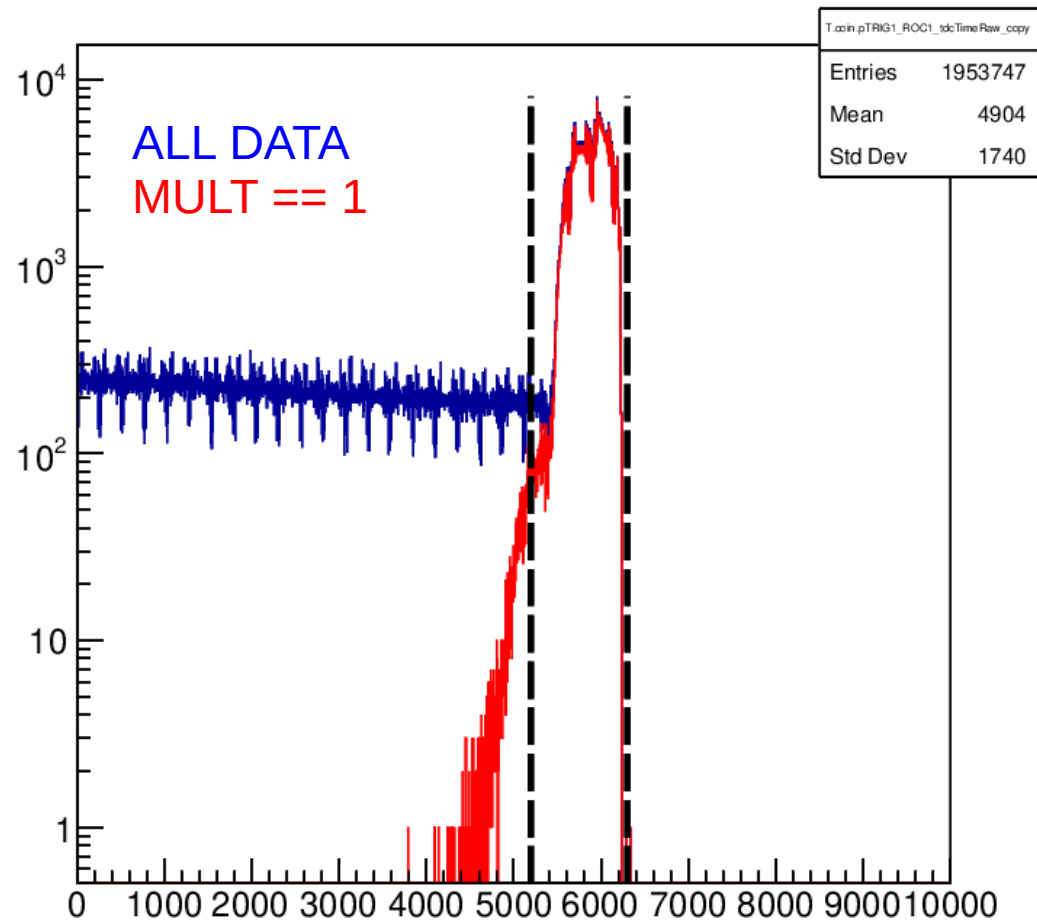
Cut Values

pTrig1_Roc1	5100	6200
pTrig4_Roc1	5600	6200
pTrig1_Roc2	5800	7000
pTrig4_Roc2	6300	7000
pT2	4700	

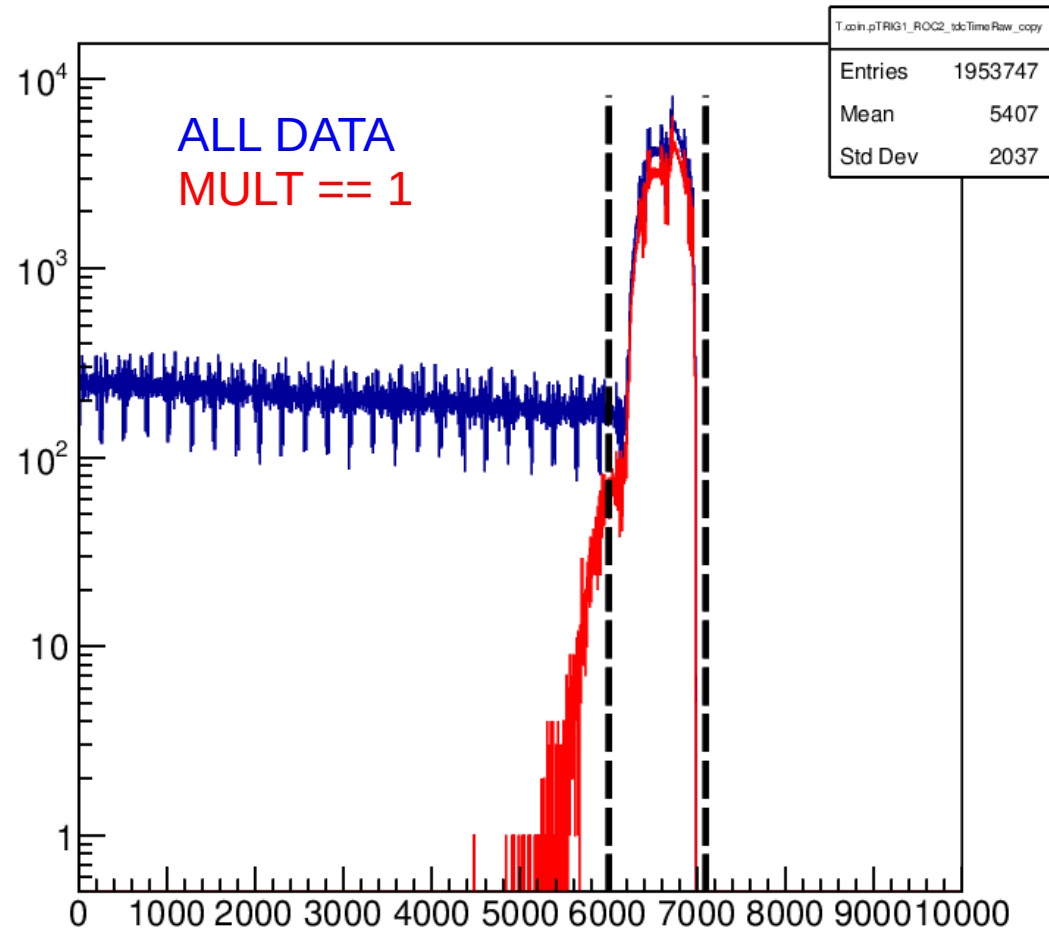


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T.coin.pTRIG1_ROC1_tdcTimeRaw

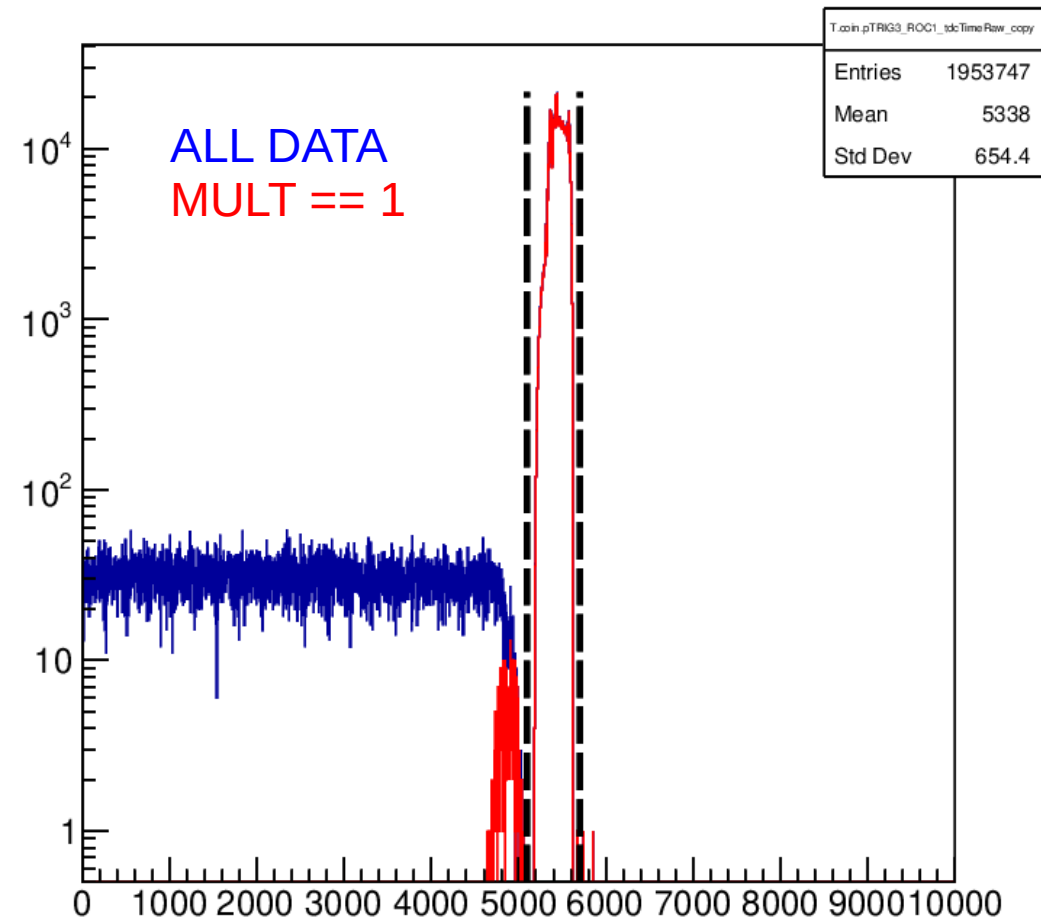


T.coin.pTRIG1_ROC2_tdcTimeRaw

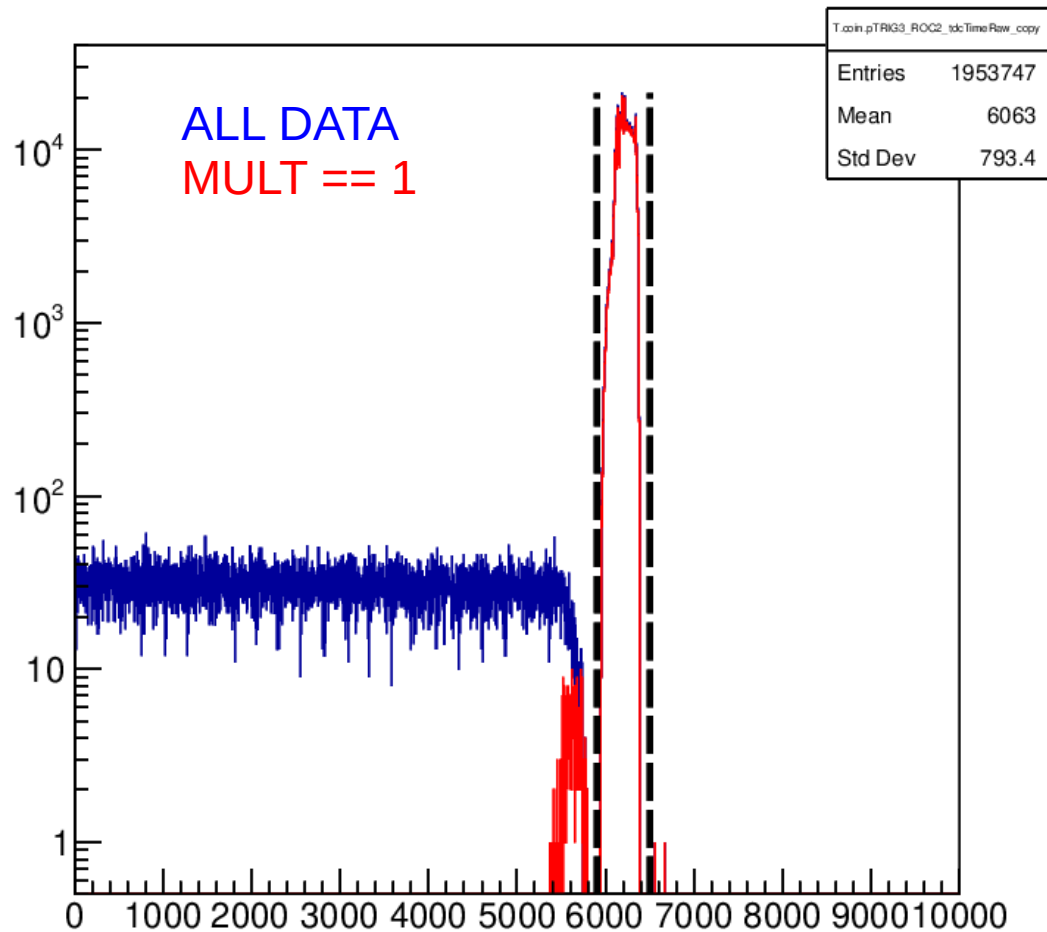


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T.coin.pTRIG3_ROC1_tdcTimeRaw



T.coin.pTRIG3_ROC2_tdcTimeRaw

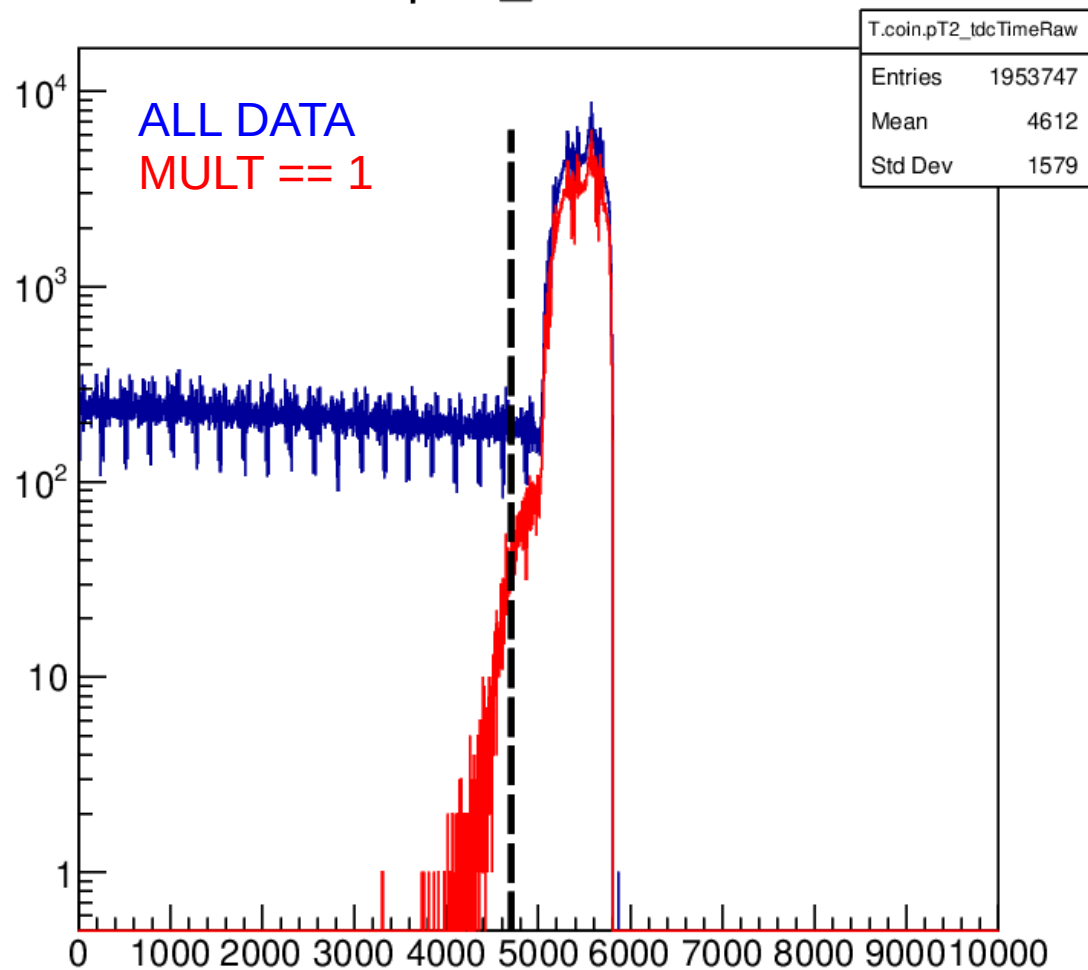


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T.coin.pT2_tdcTimeRaw

Cut Values

pTrig1_Roc1	5200	6300
pTrig4_Roc2	6000	7100
pTrig3_Roc1	5100	5700
pTrig3_Roc2	5900	6500
pT2	4800	



Conclusion

- Next step is to test these values, and compare them to those used online
- After that I'm waiting for Juniad to push his changes to the param files before implementing these changes.