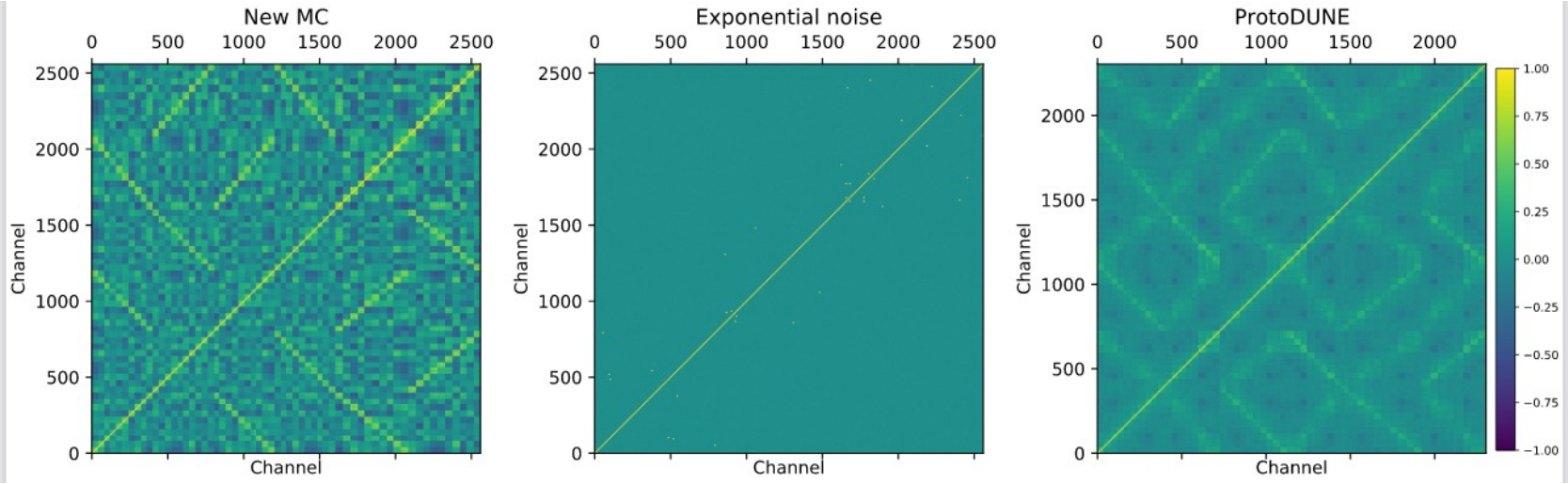
Status on Noise TPs

Pierre & Thiago
PP/DS WG Meeting
23/Mar/2021

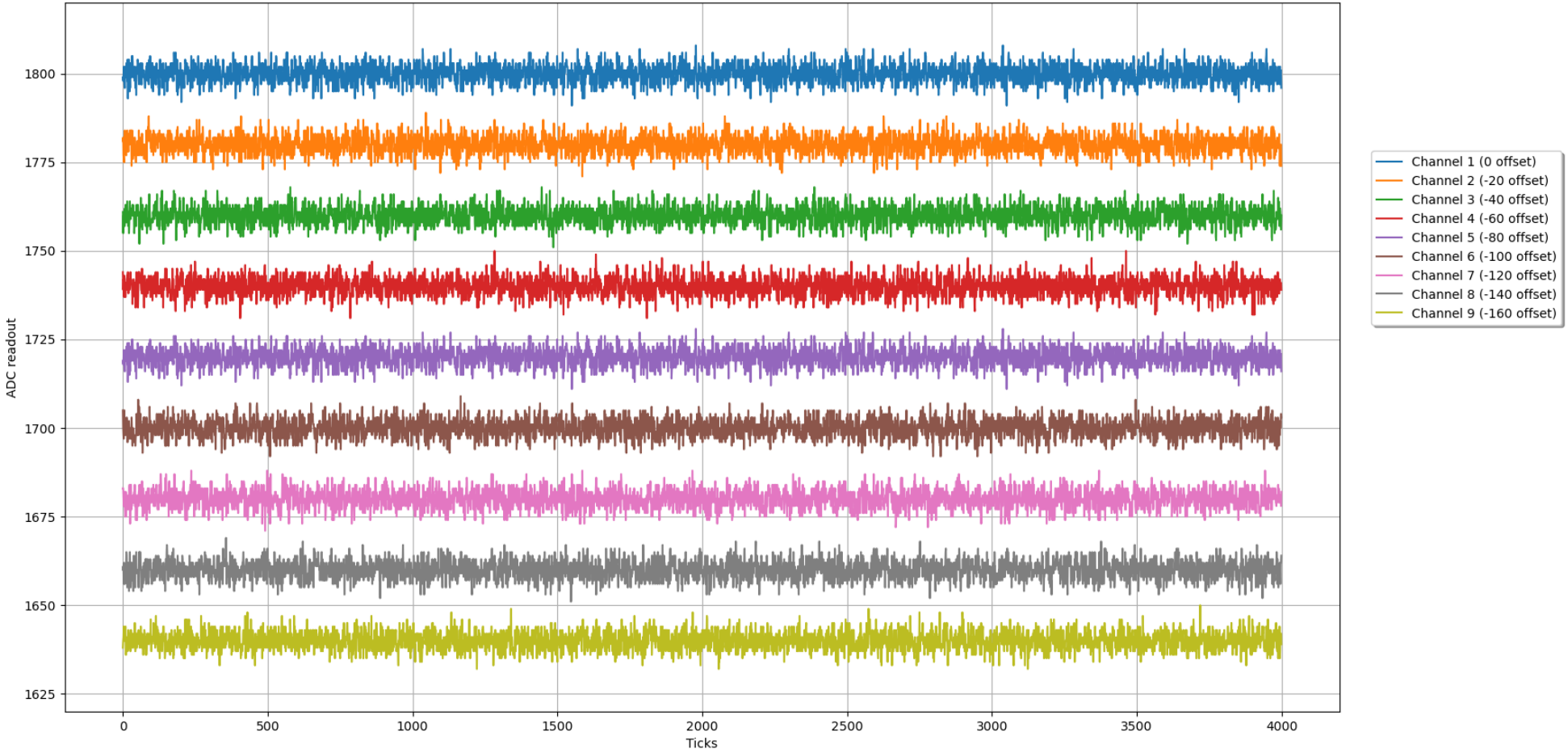
Intro

- New noise (ProtoDUNE based) implemented
  - See Babak & Pierre's talk (here)

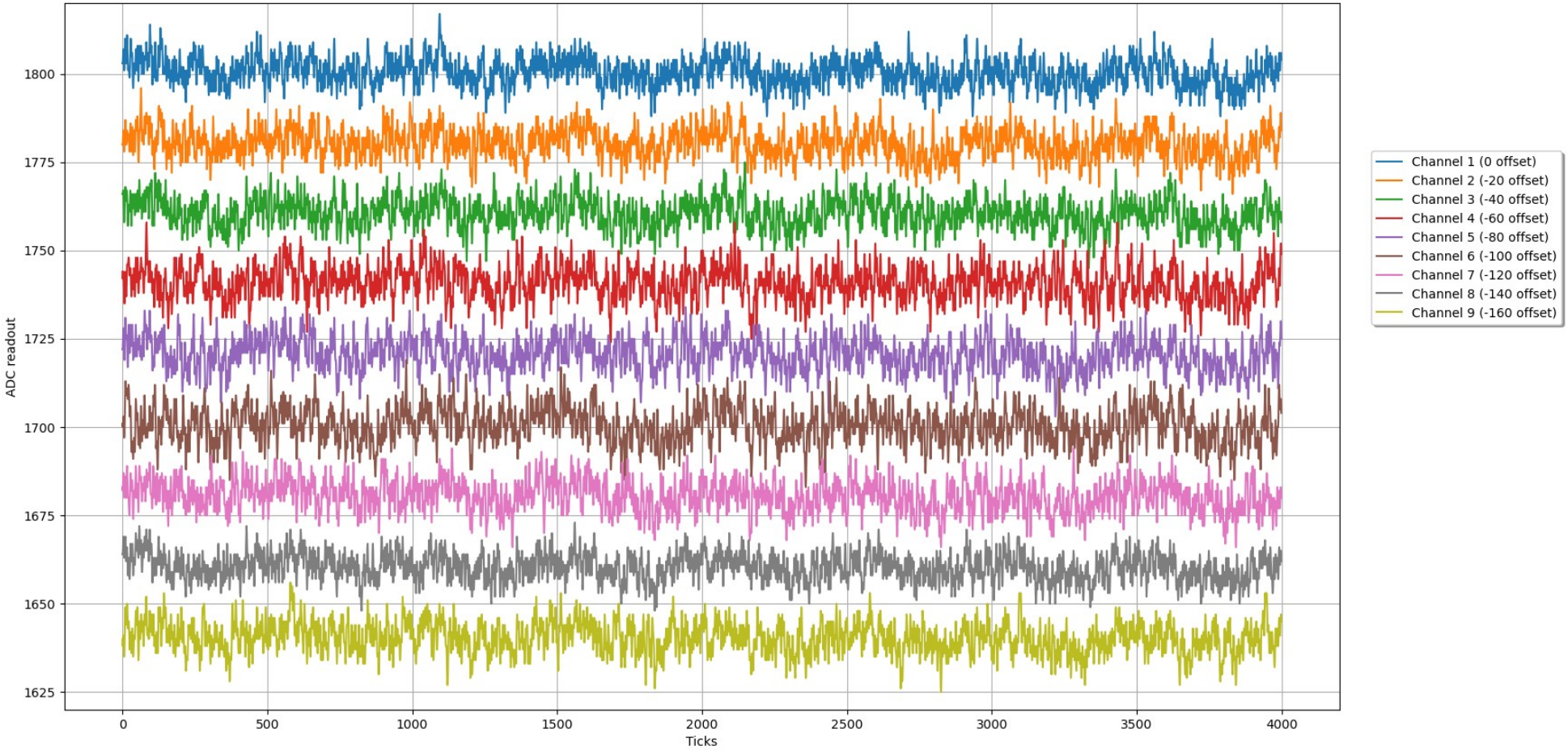


  - Checking impact on TP generation
  - Generated 0 MeV electrons for detsim

Old Noise


ADC readout
1800
1775
1750
1725
1700
1675
1650
1625
0
500
1000
1500
2000
2500
3000
3500
4000
Ticks
Channel 1 (0 offset)
Channel 2 (-20 offset)
Channel 3 (-40 offset)
Channel 4 (-60 offset)
Channel 5 (-80 offset)
Channel 6 (-100 offset)
Channel 7 (-120 offset)
Channel 8 (-140 offset)
Channel 9 (-160 offset)

New Noise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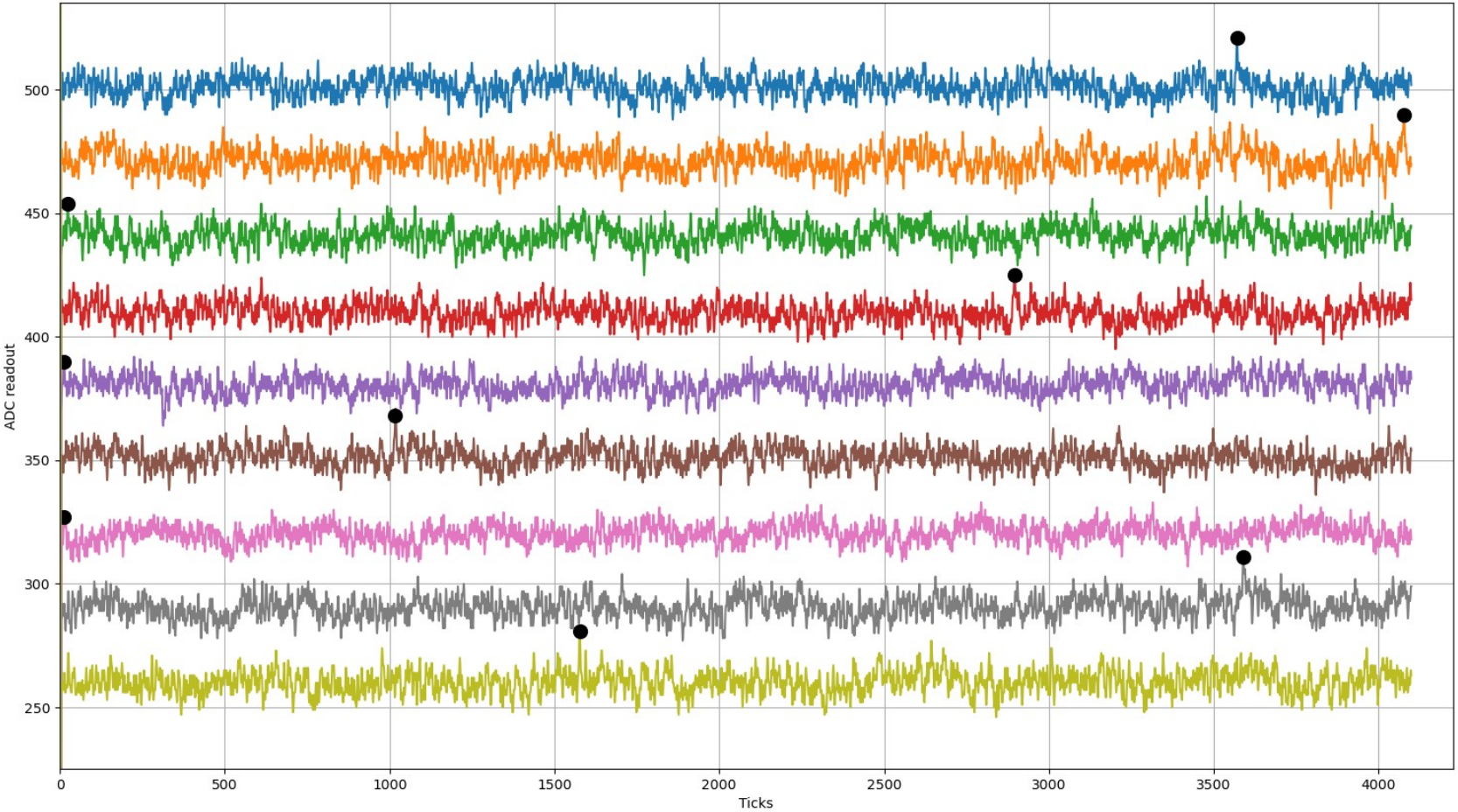
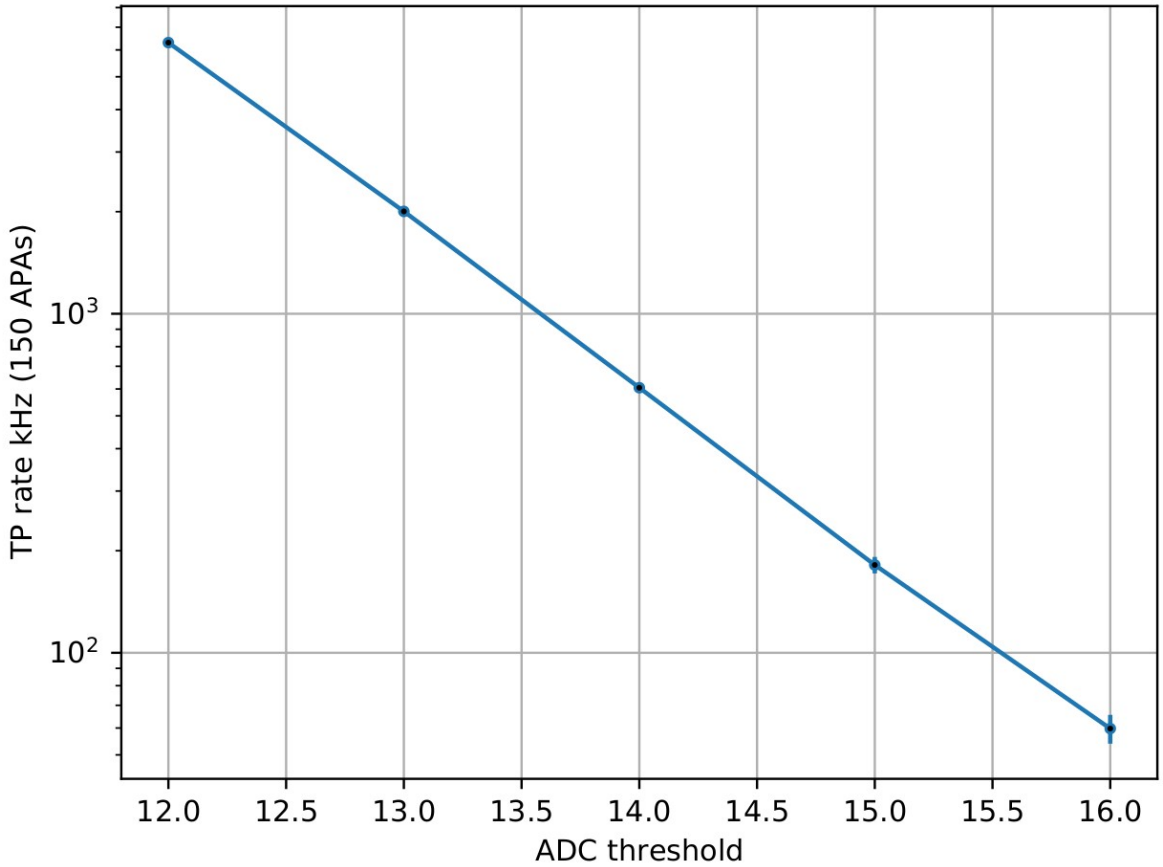
Running TP Finder



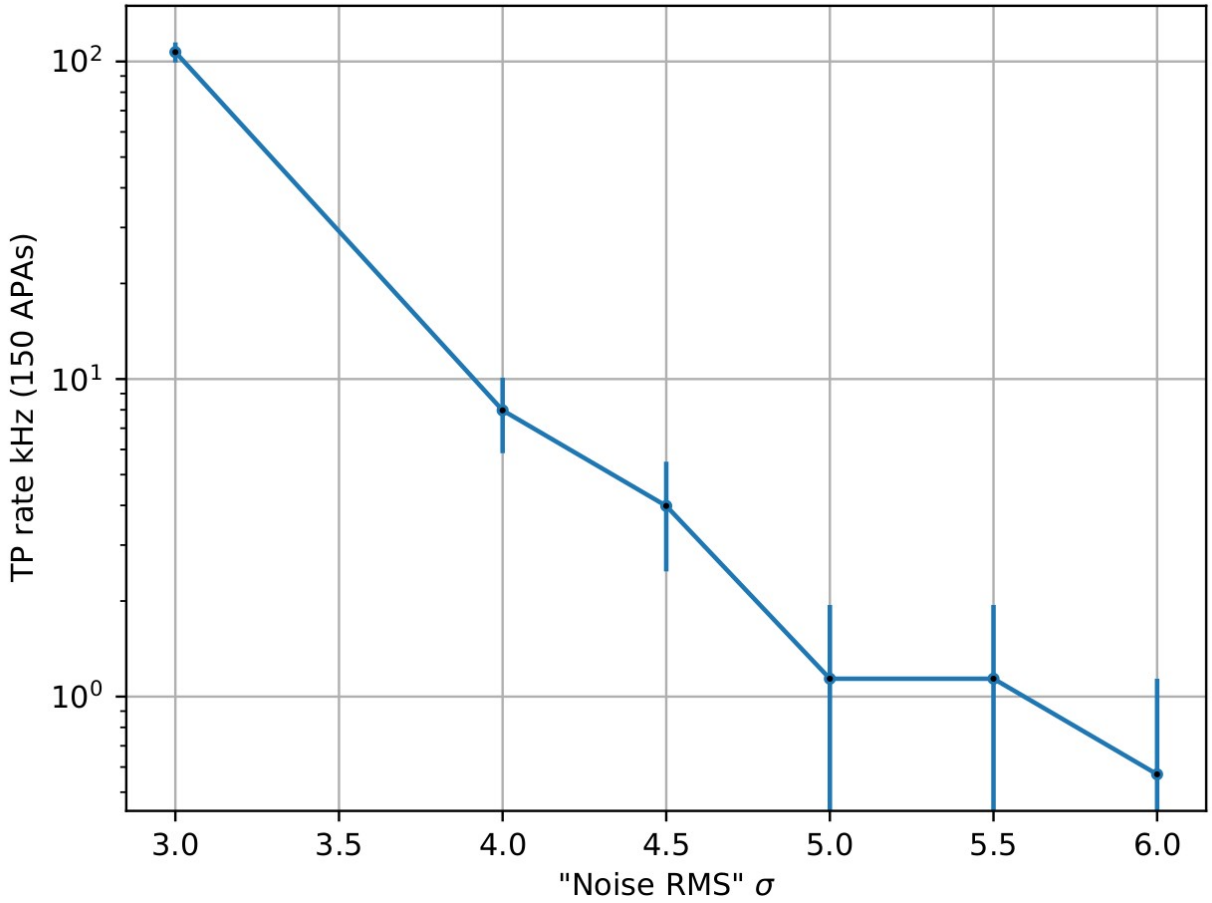
16 ADC threshold

TP Rate due to Noise (I)



First 100 ticks of a ch. ignored

TP Rate due to Noise (II)



First 100 ticks of a ch. ignored

Next Steps

- Get TA rate
  - Needs a massive data production
  - Fix technical issue
    - clustering crashing with noise only files