



最近進めたこと

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目次

NCUのtestbench

波形測定 of データ

calibration test of データ解析

Summery

Next to do

NCUのtestbench

手順

- ✓ Install Software in PC
- ✓ How to Connect
- ✓ Operation on Calibration test
- ? Check the Result by root
- ✓ Observe Cosmic Ray

原因？

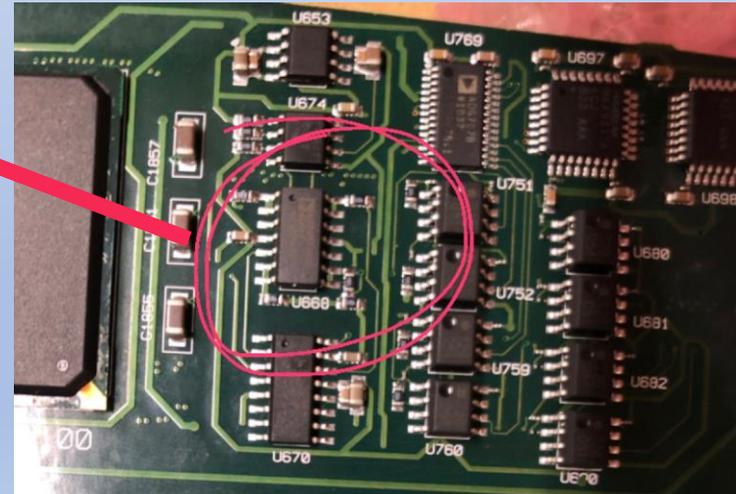
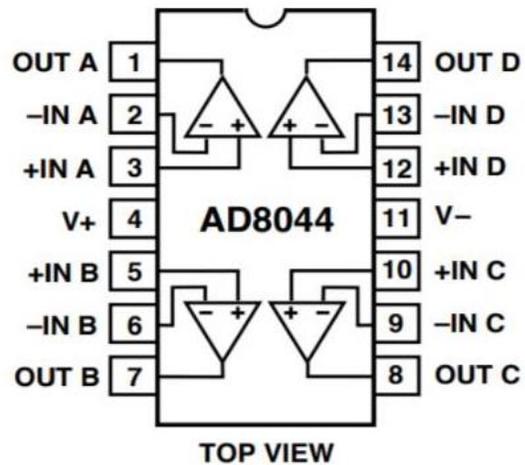
- ? ROCから出るtest pulse
- ? FEM, FEM-IBで光るLED
- ? ROCにかかる電圧値

NCUのtestbench

? ROCから出るtest pulse

- ✓ pin 1~14まですべてを確認して、NCUで見られるものと比較する

CONNECTION DIAGRAM
14-Lead Plastic DIP and SOIC

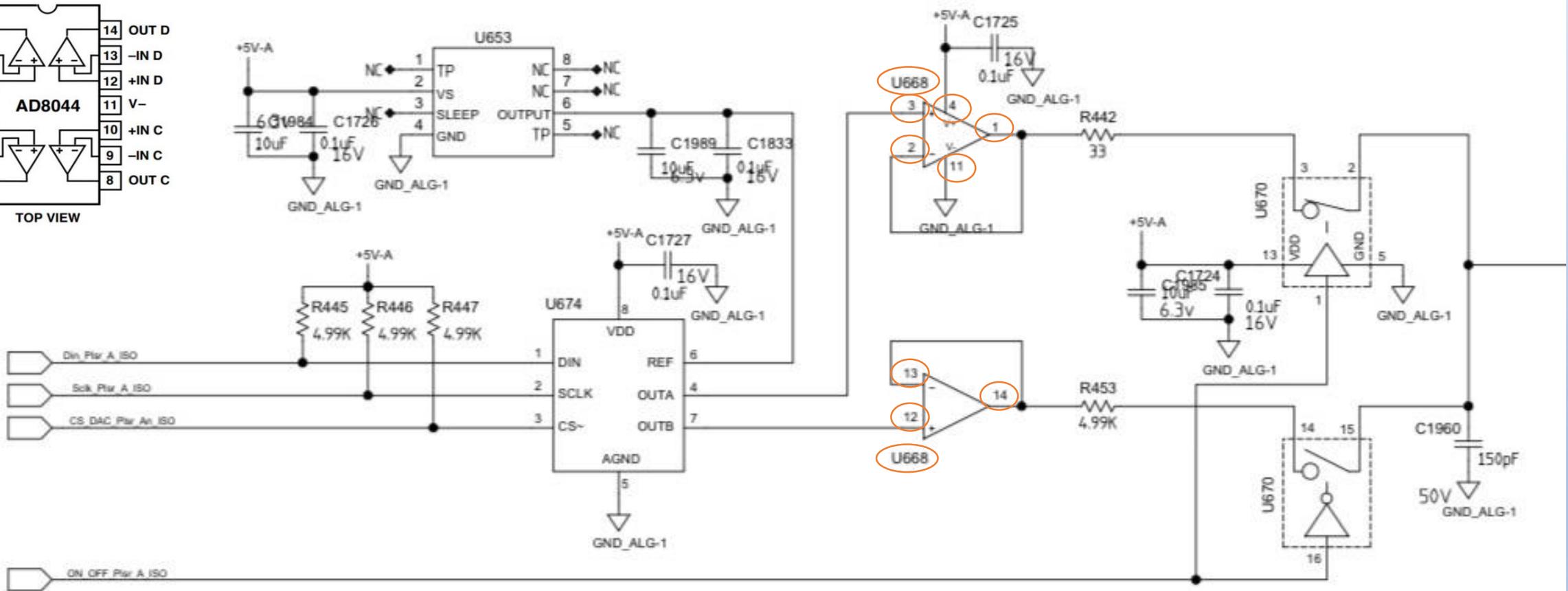
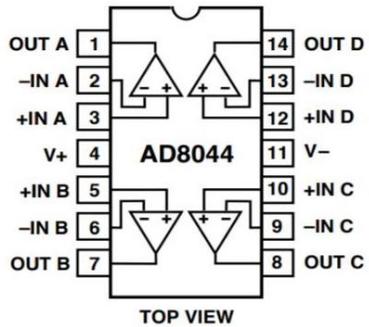


NCUのtestbench

? ROCから出るtest pulse

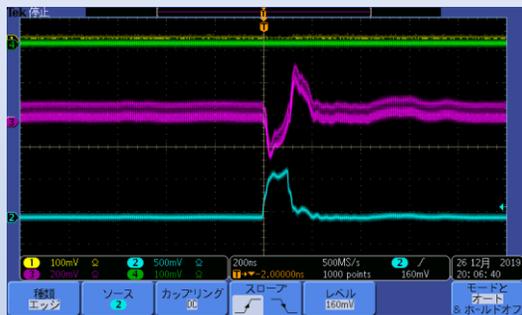


CONNECTION DIAGRAM
14-Lead Plastic DIP and SOIC



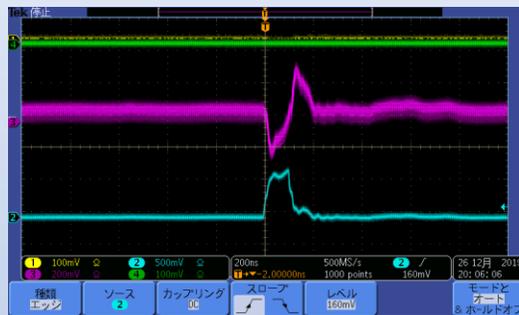
NCUのtestbench

? ROCから出るtest pulse

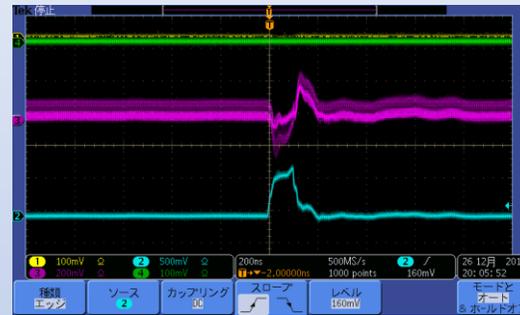


U668_pin01

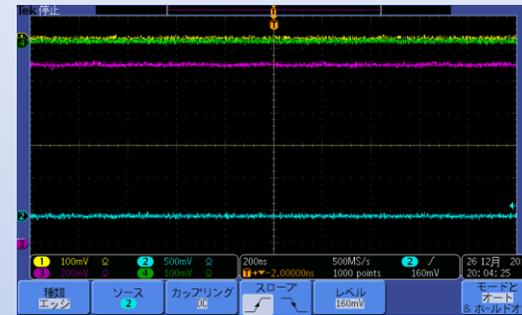
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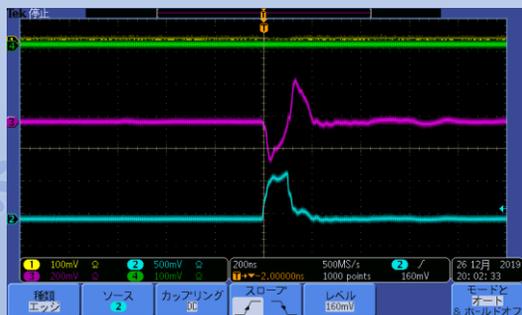
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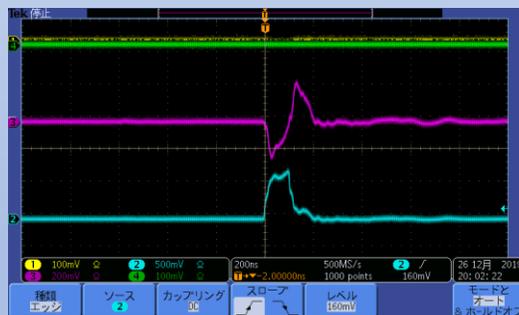
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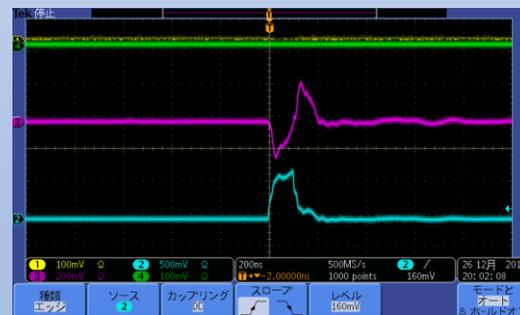
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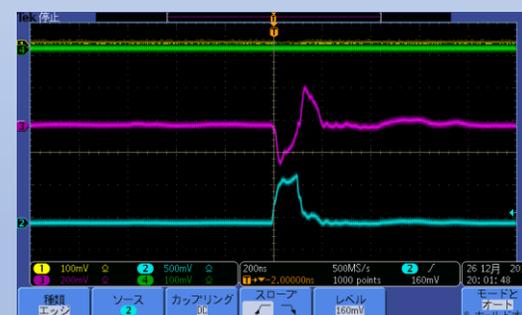
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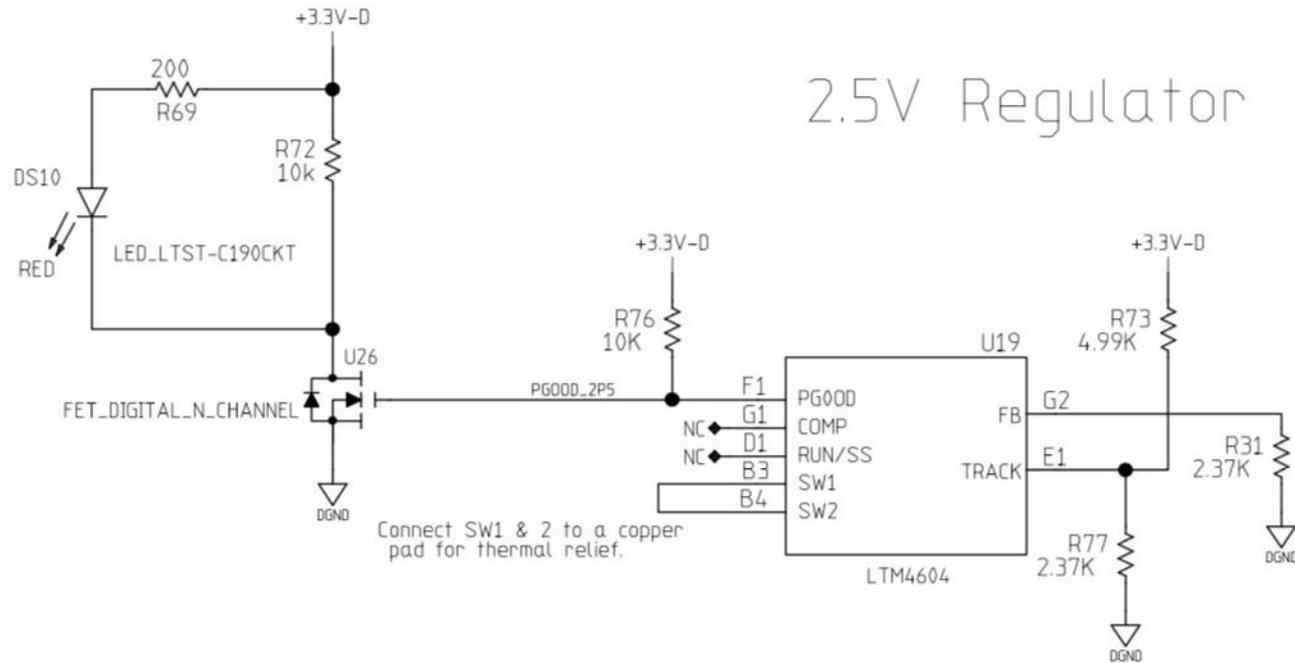
U668_pin13



U668_pin14

NCUのtestbench

? FEM, FEM-IBで光るLED



in NCU

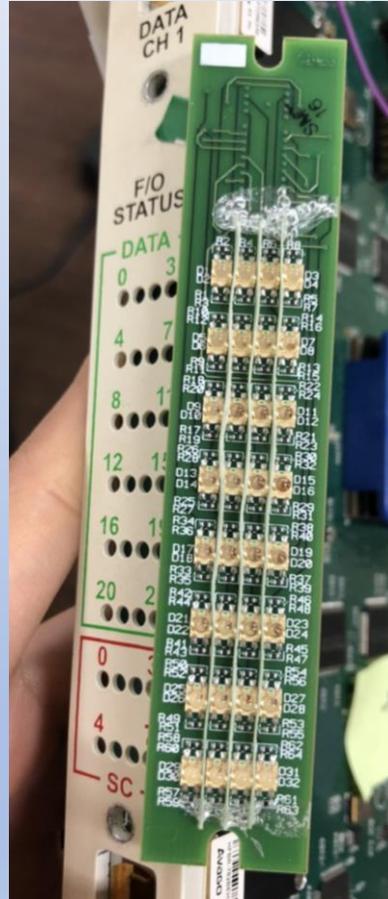
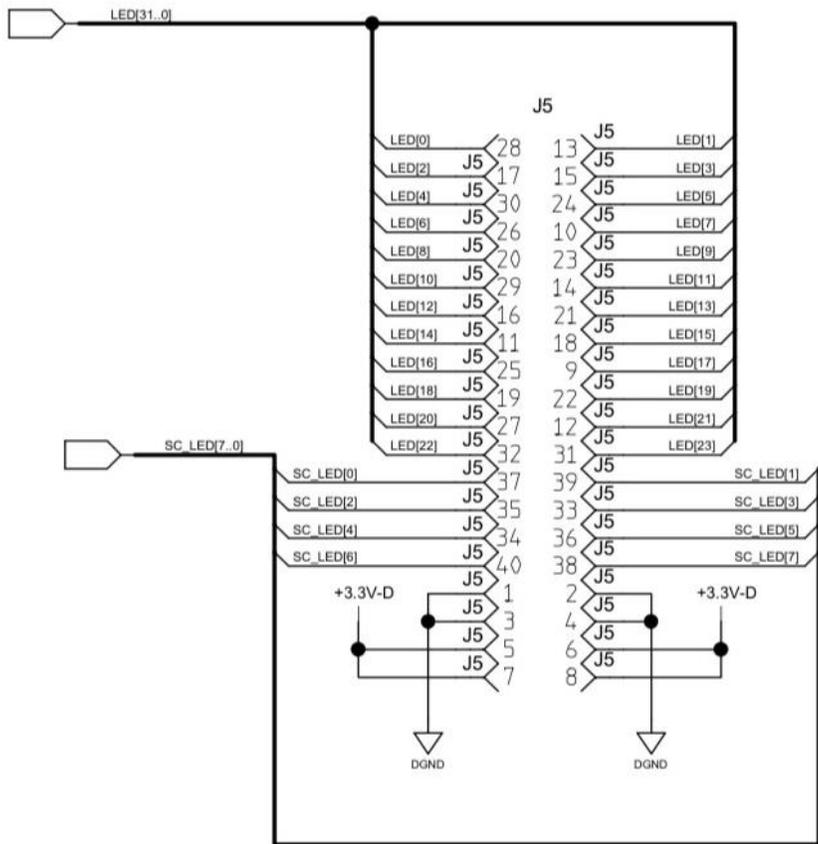


in NWU



NCUのtestbench

? FEM, FEM-IBで光るLED



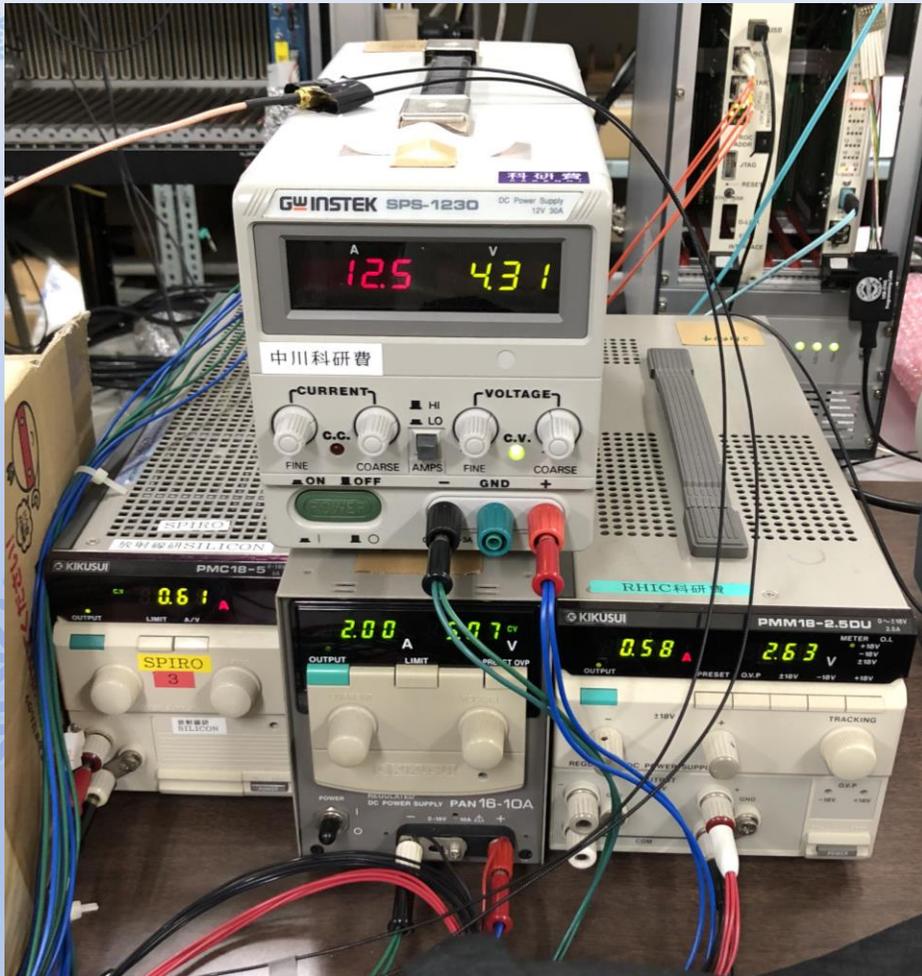
- GUIでGlobal Startをする過程で押すそれぞれのボタンと、対応するLEDがそれぞれ正しく光っているか確認



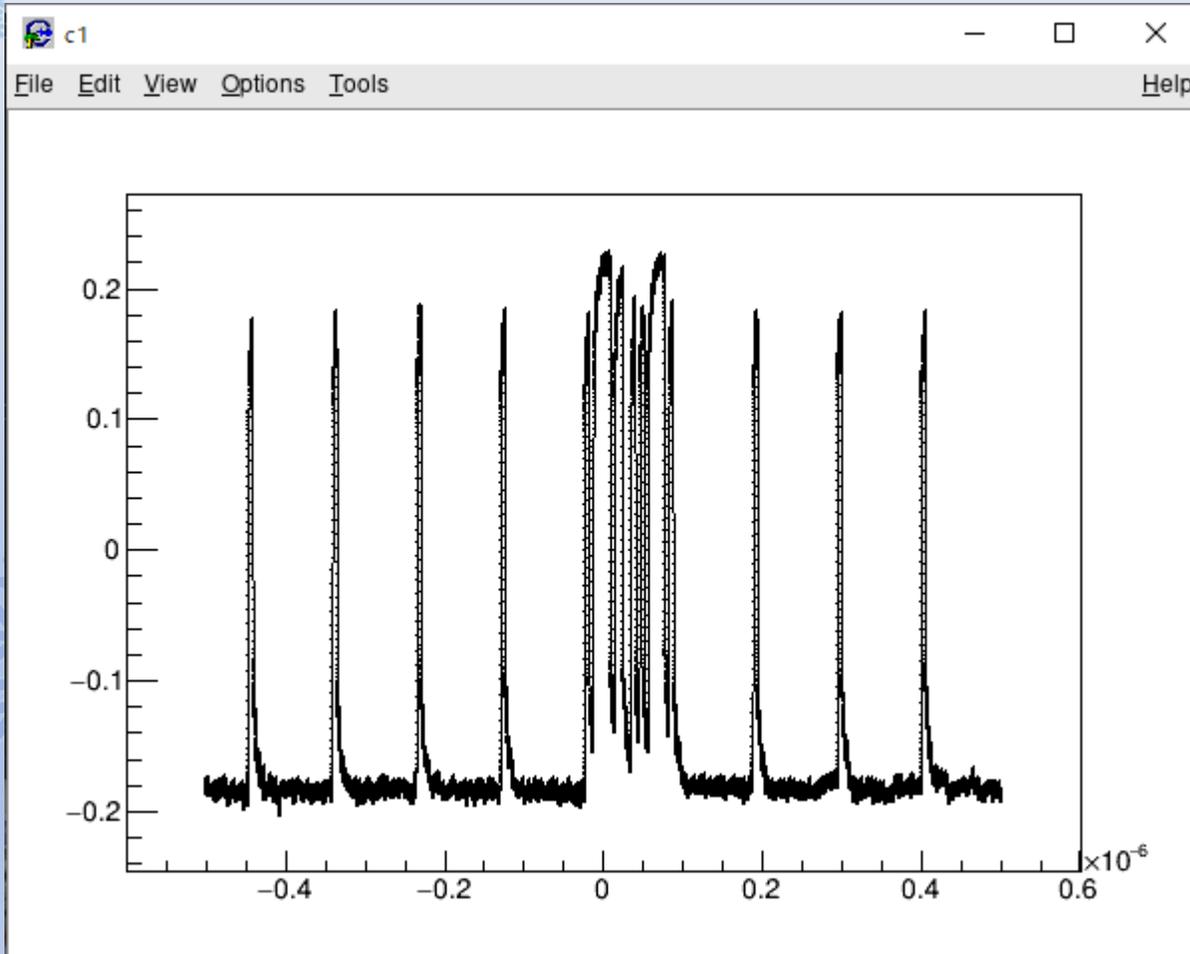
NCUのtestbench

? ROCにかかる電圧値

- それぞれの電圧値がどう変化するか、何によって定められているのか確認する



波形測定データの



- ✓ rootを用いてテキストファイルをグラフ化した
- ✓ このデータからeyediagramを作る

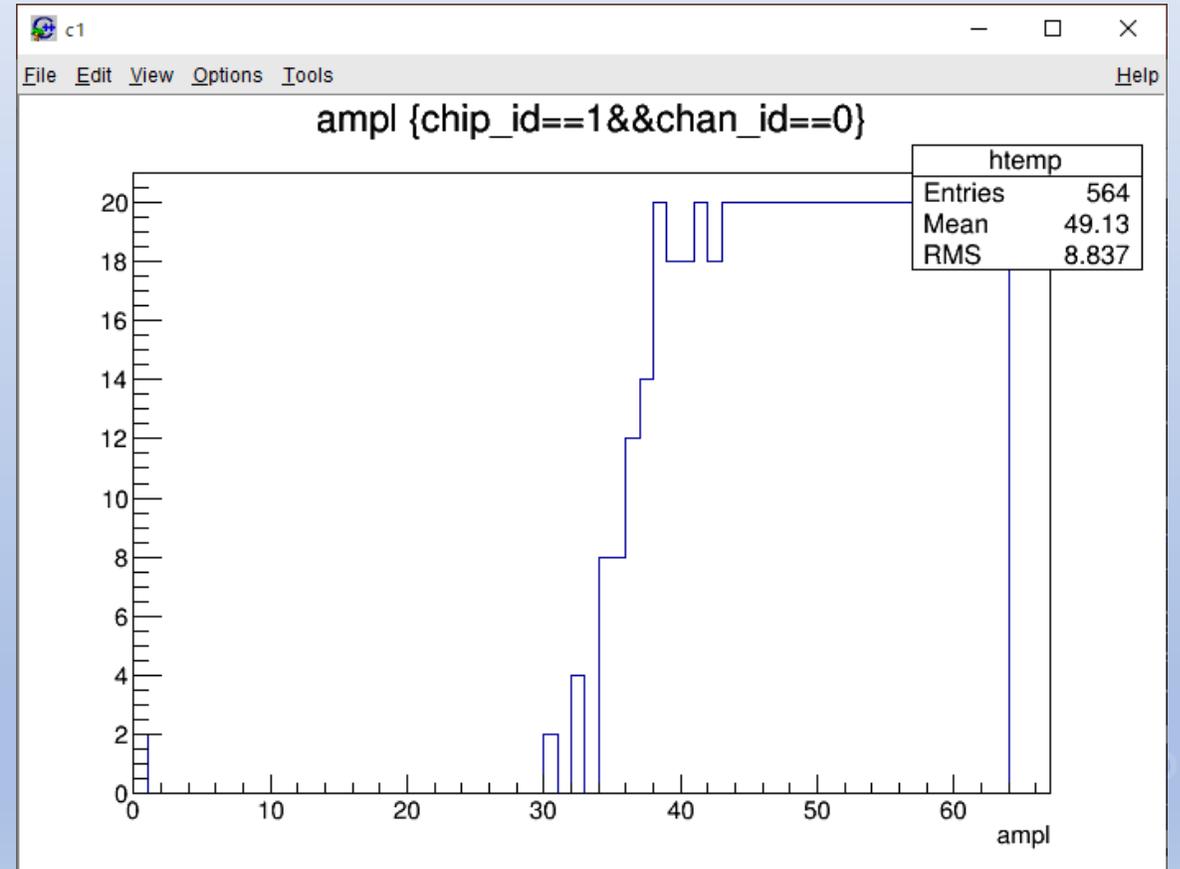
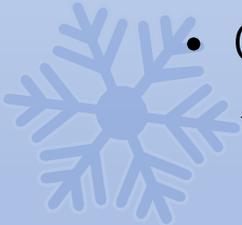


calibration testの データ解析



Busextenderを通した calibration testのデータについて

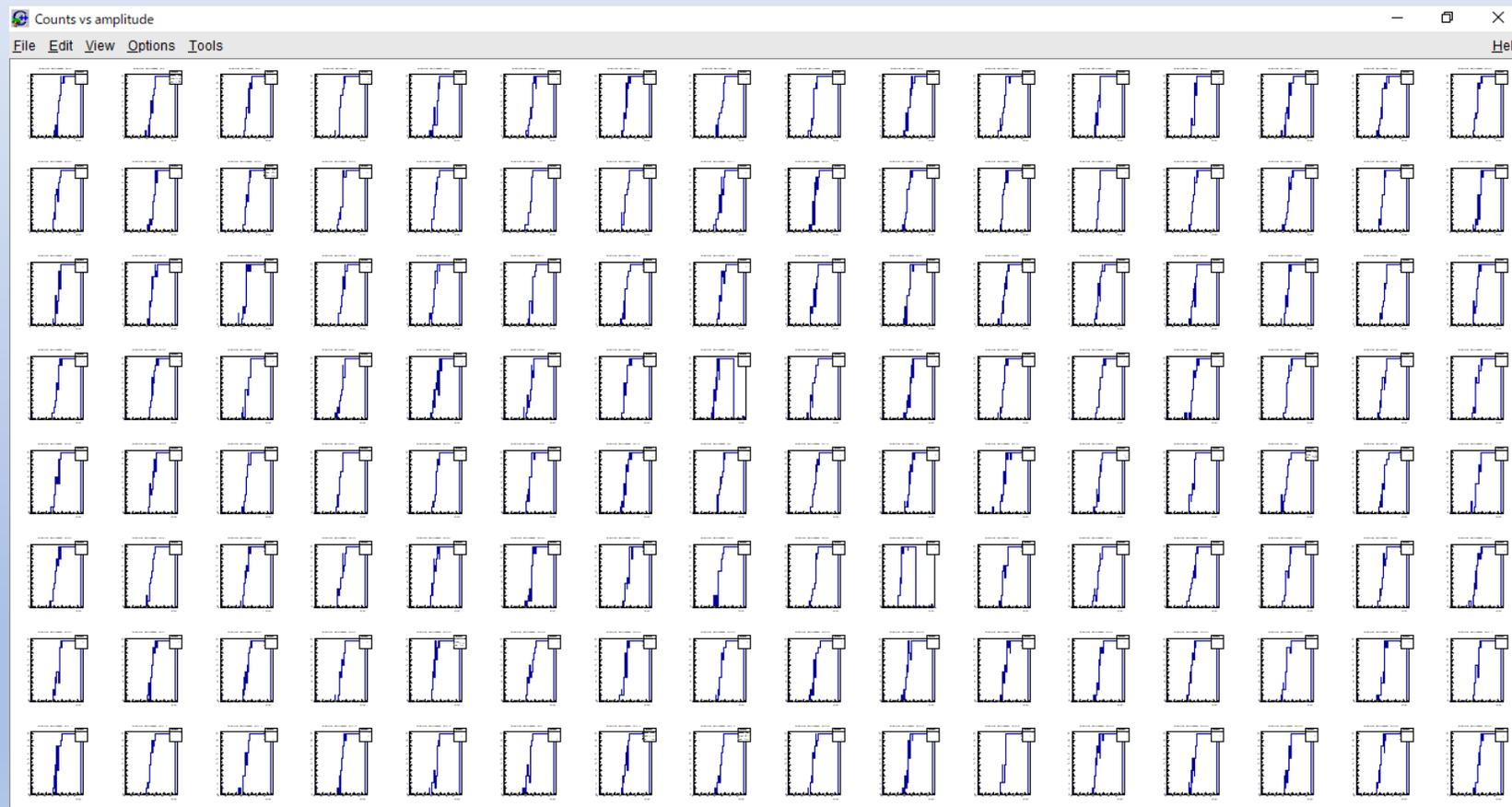
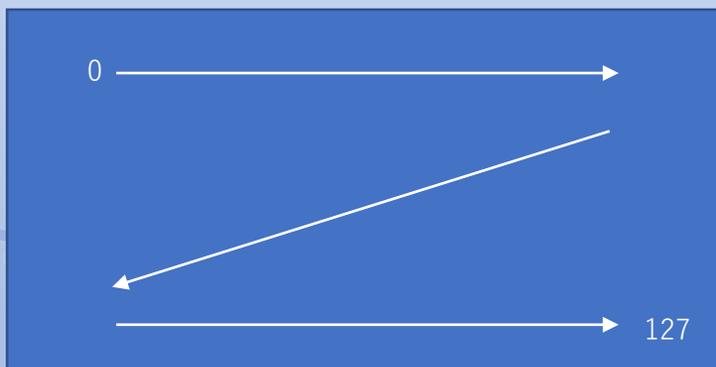
- エラー関数をこのグラフの上にプロットする
- Counts vs Amplitudeのグラフからノイズ評価を行う



calibration testの データ解析



Counts vs Amplitudeの
chip_id==1&&chan==0~127
のグラフ



Summery



- ✓ NCUのtestbench
 - ✓ LEDの回路を詳しく調べたら何かわかるかもしれない
 - ✓ NCUでは作られるtest pulseの形が異なっている可能性がある
 - ✓ 電圧値を確認する
- ✓ Busextenderのpulseの解析
- ✓ test pulseのノイズ解析





Next to do

- ✓LEDの回路を詳しく読み進めていく
 - ✓NCUと連絡を取り合う
 - ✓電源電圧値の最適化を行う
 - ✓電圧値とデータの観測について相関関係を確認する
 - ✓Busextenderを通したtest pulseの波形を解析する
 - ✓eyediagramを作る
 - ✓エラー関数をFitして解析を進める
- 



Back Up



Contents



Software is Installed in PC

How to Connect

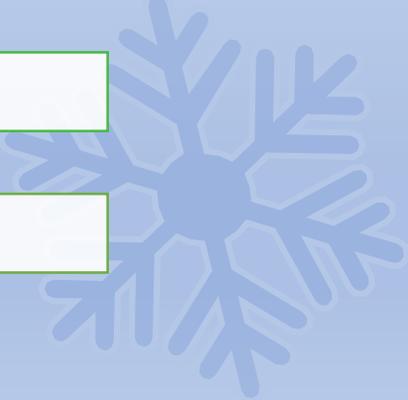
Operation on Calibration test

Result in root



Summary

Next to do

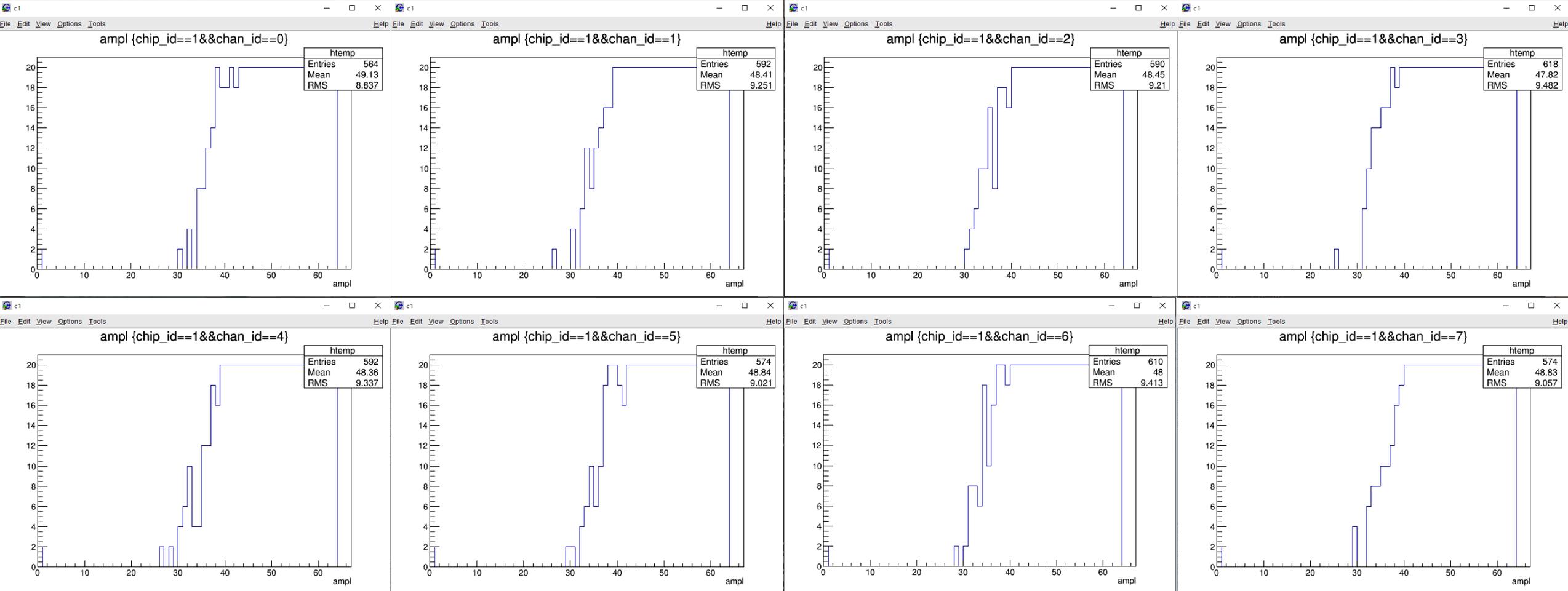


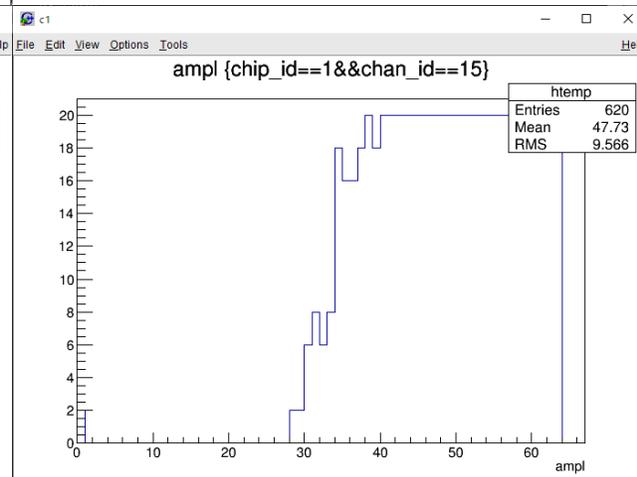
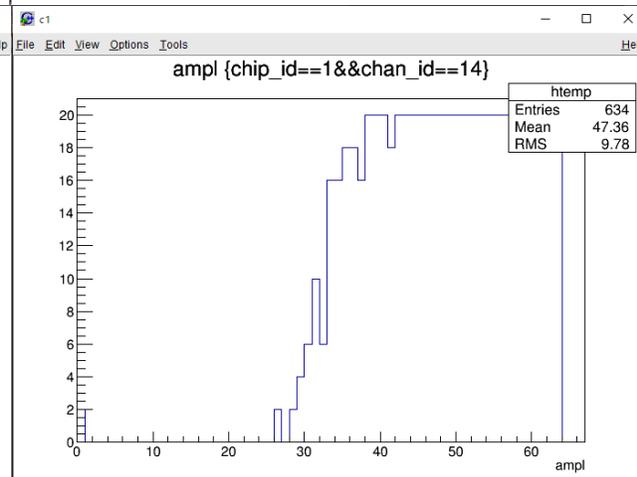
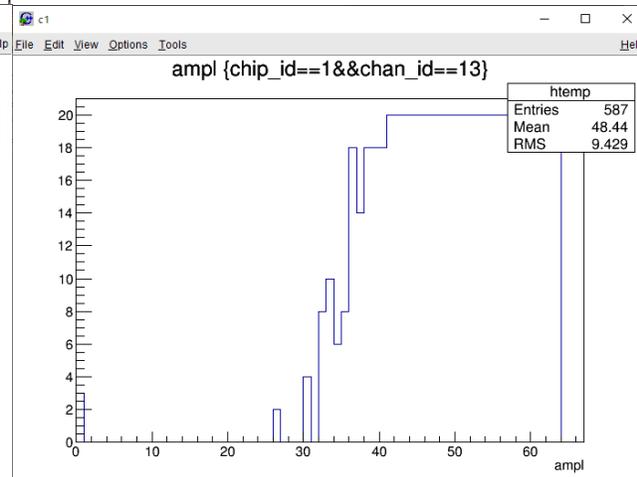
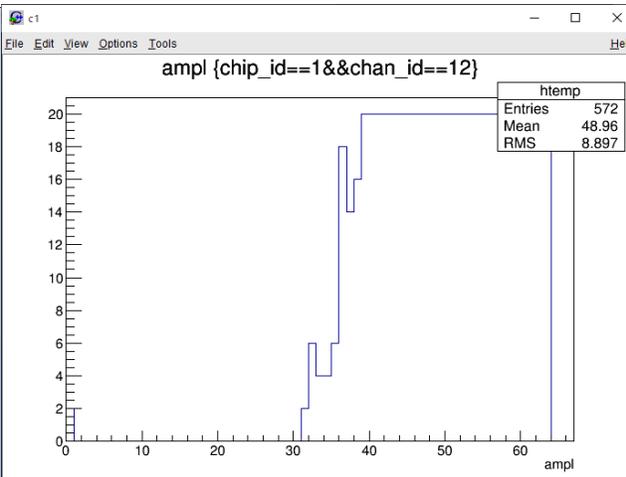
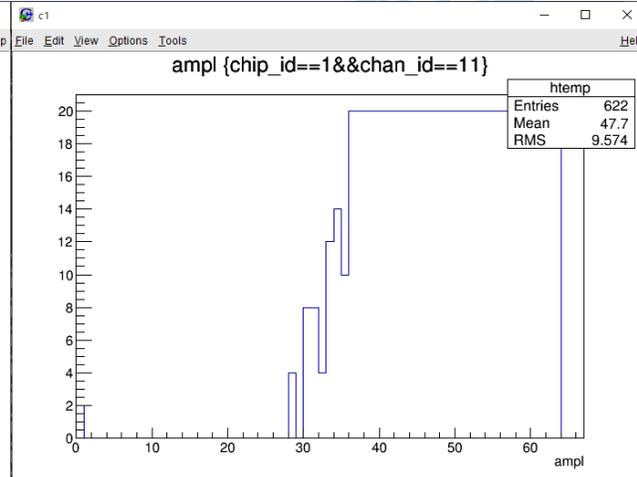
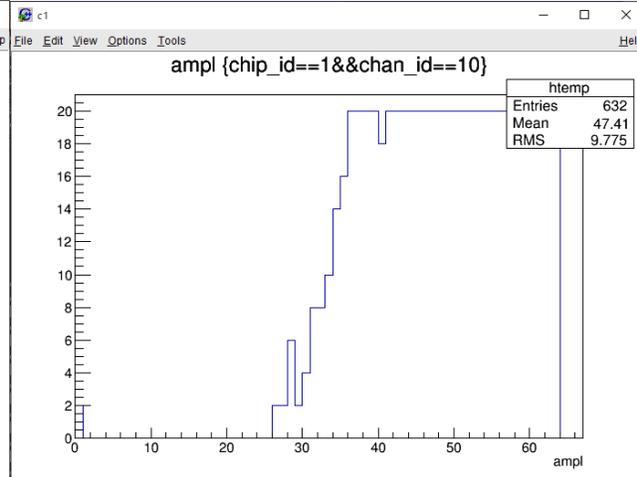
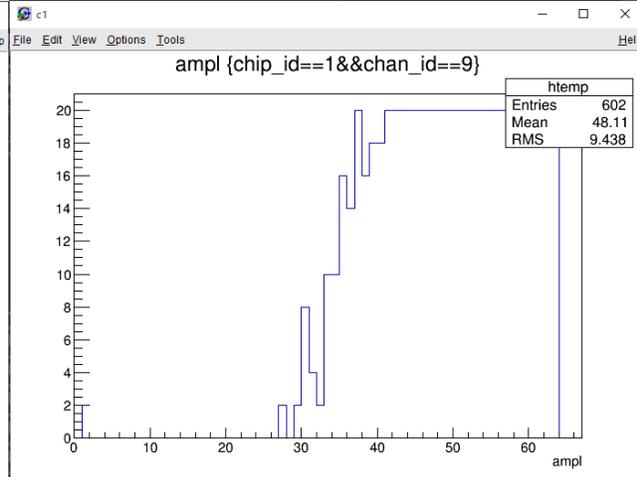
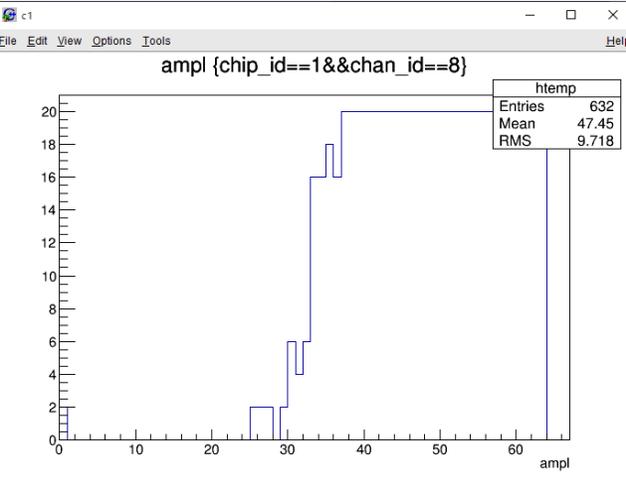


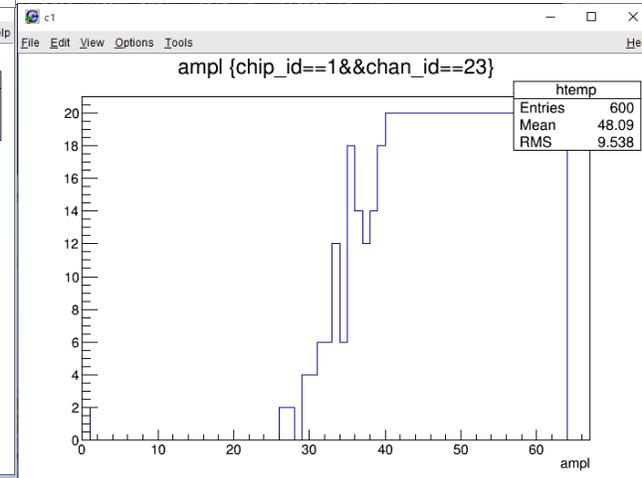
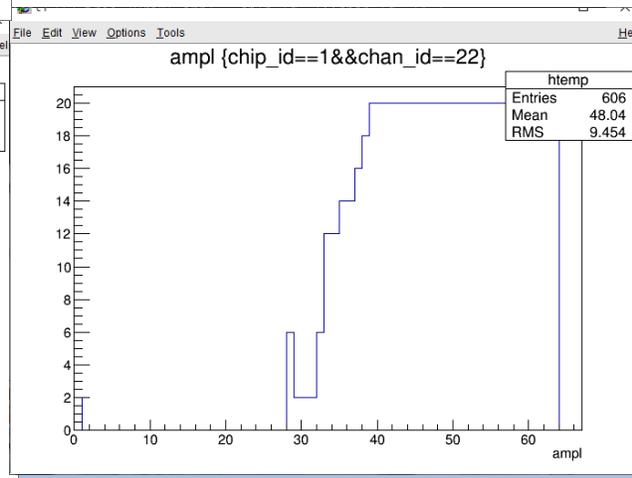
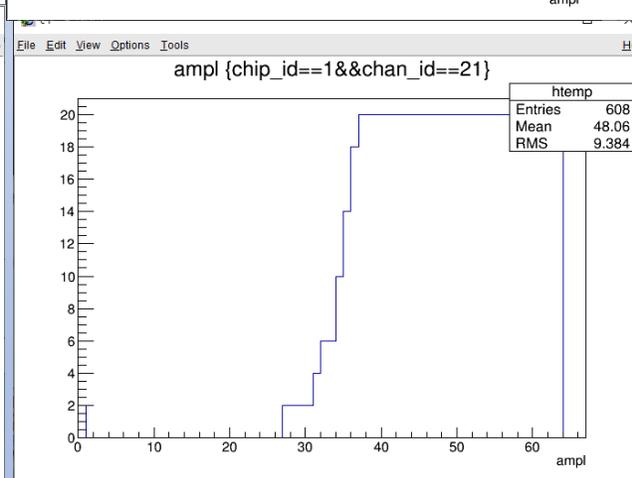
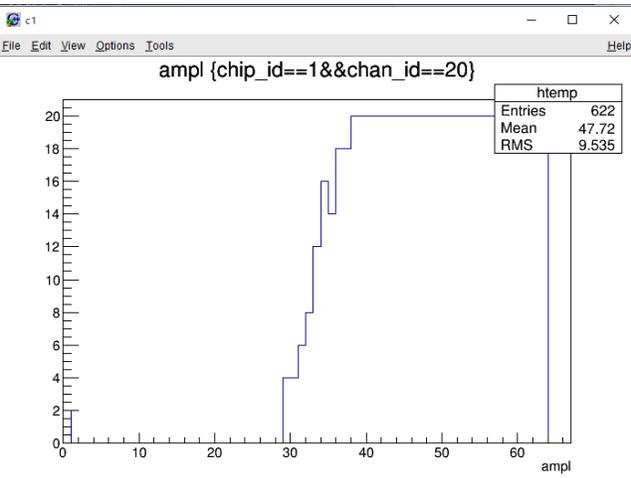
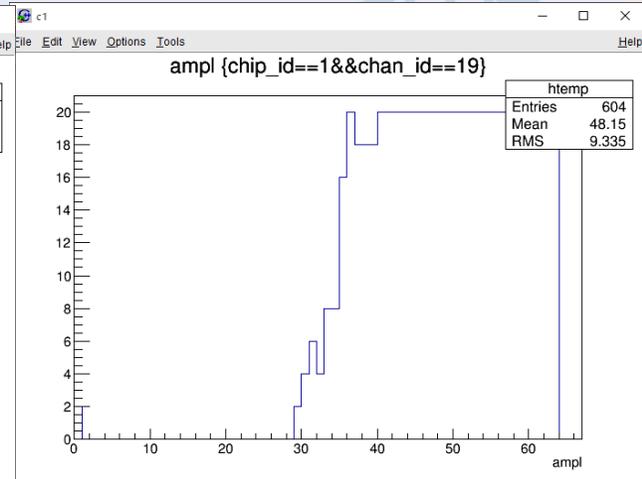
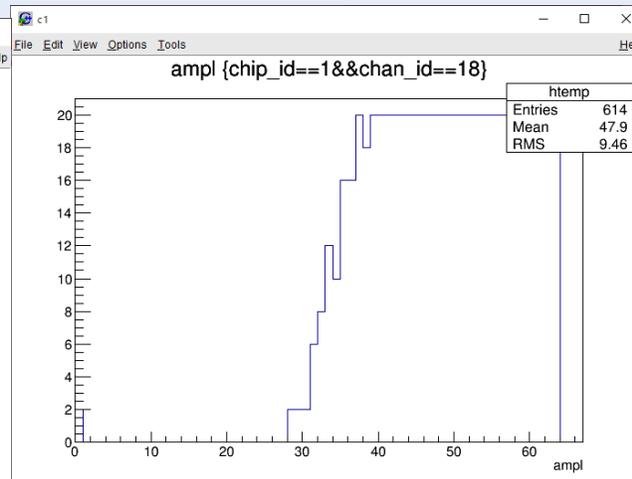
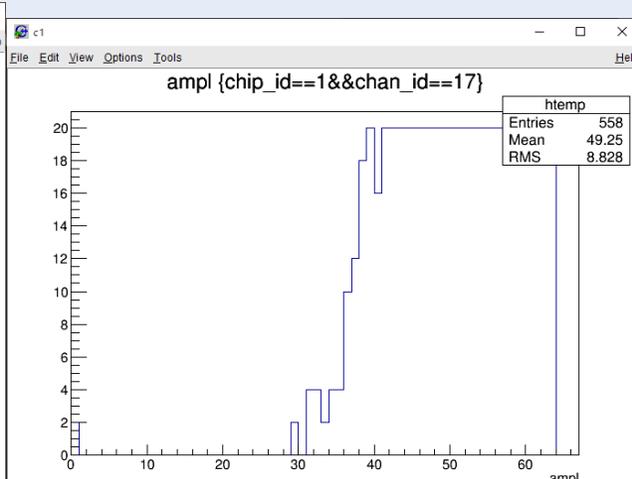
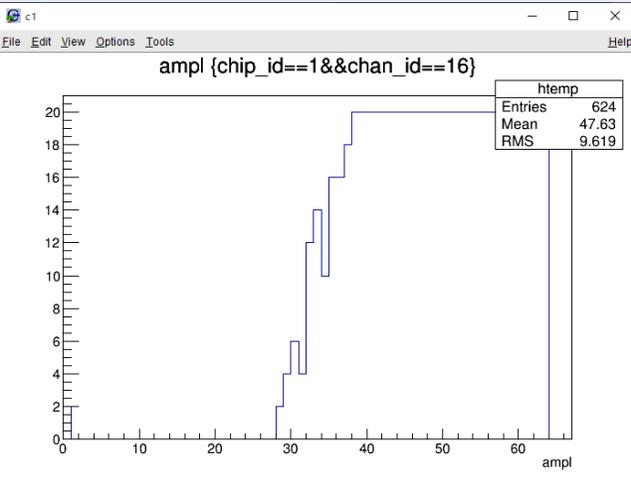
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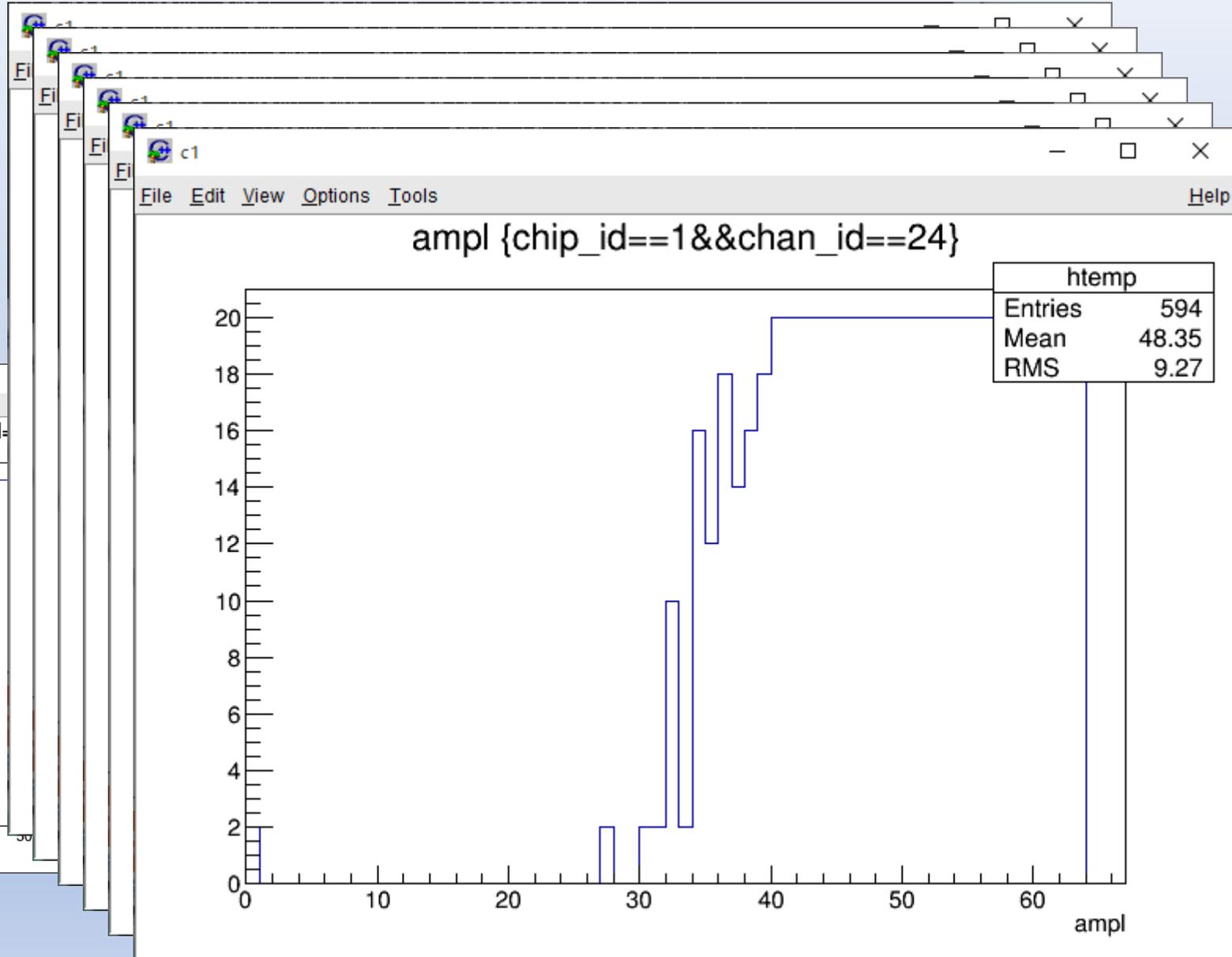
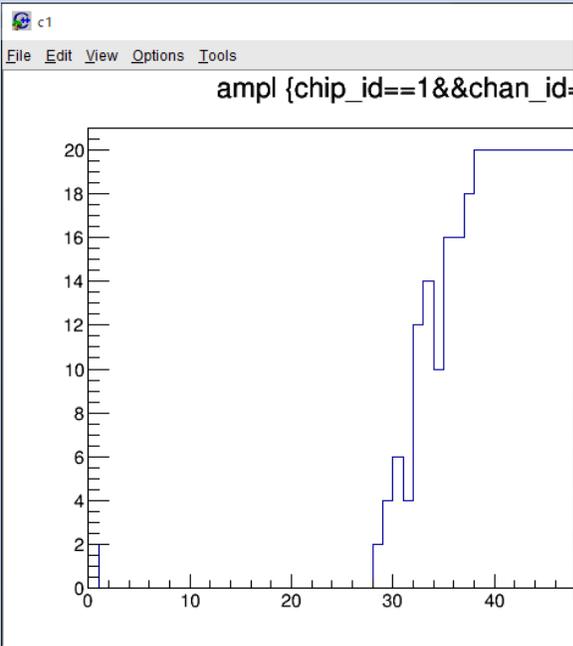
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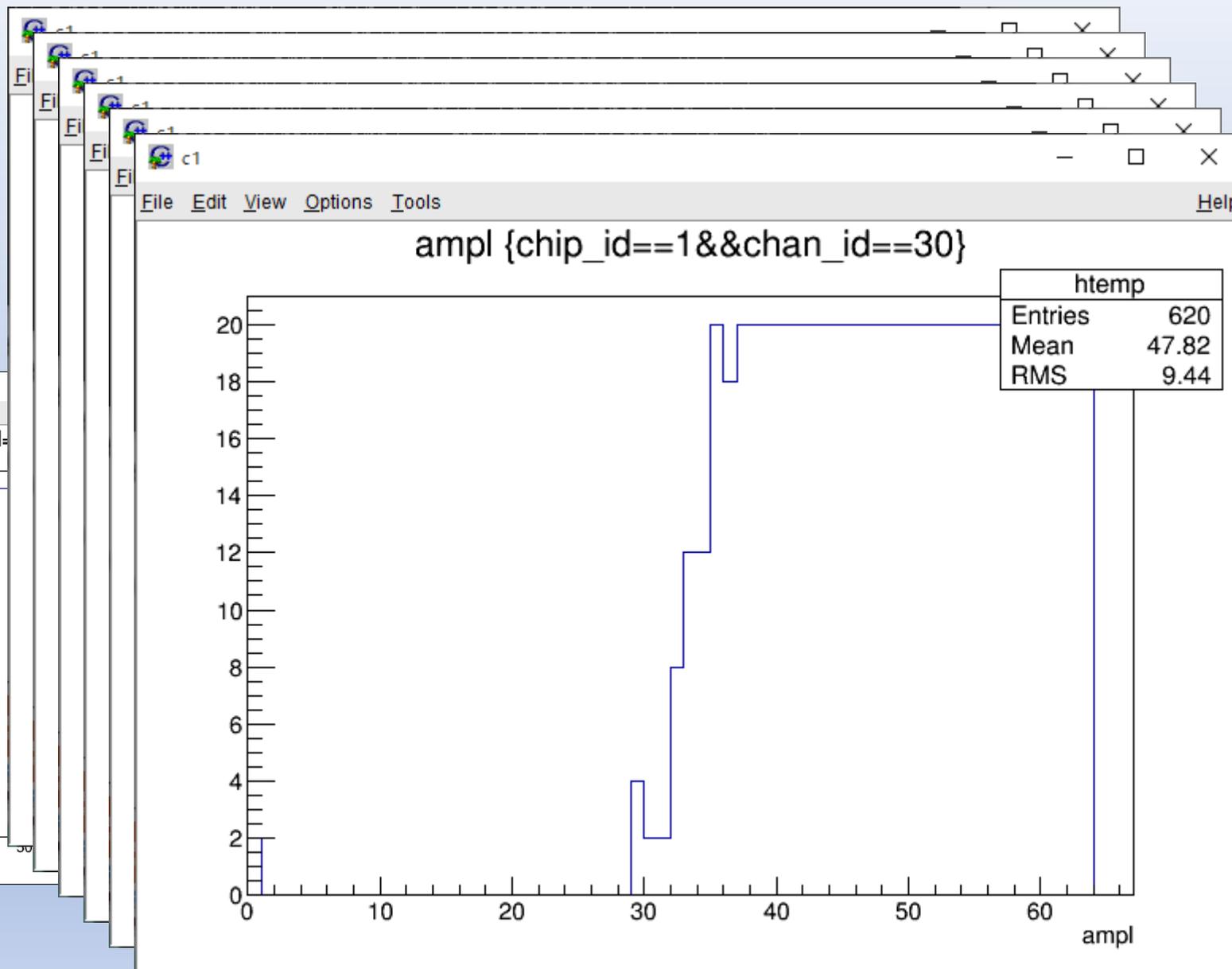
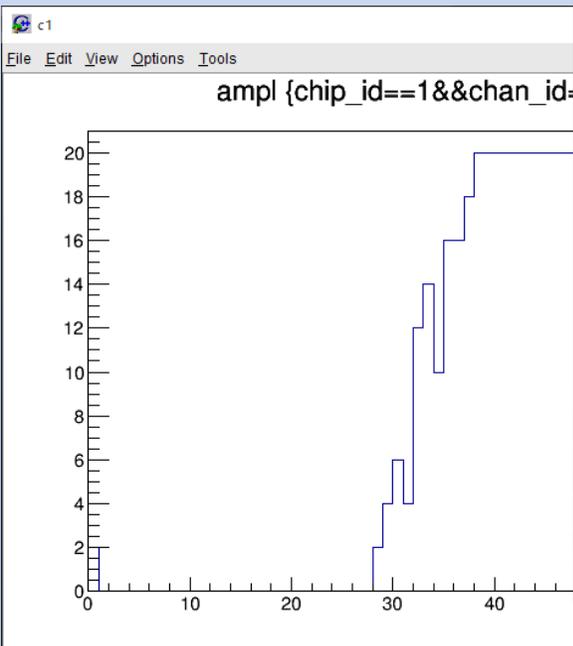


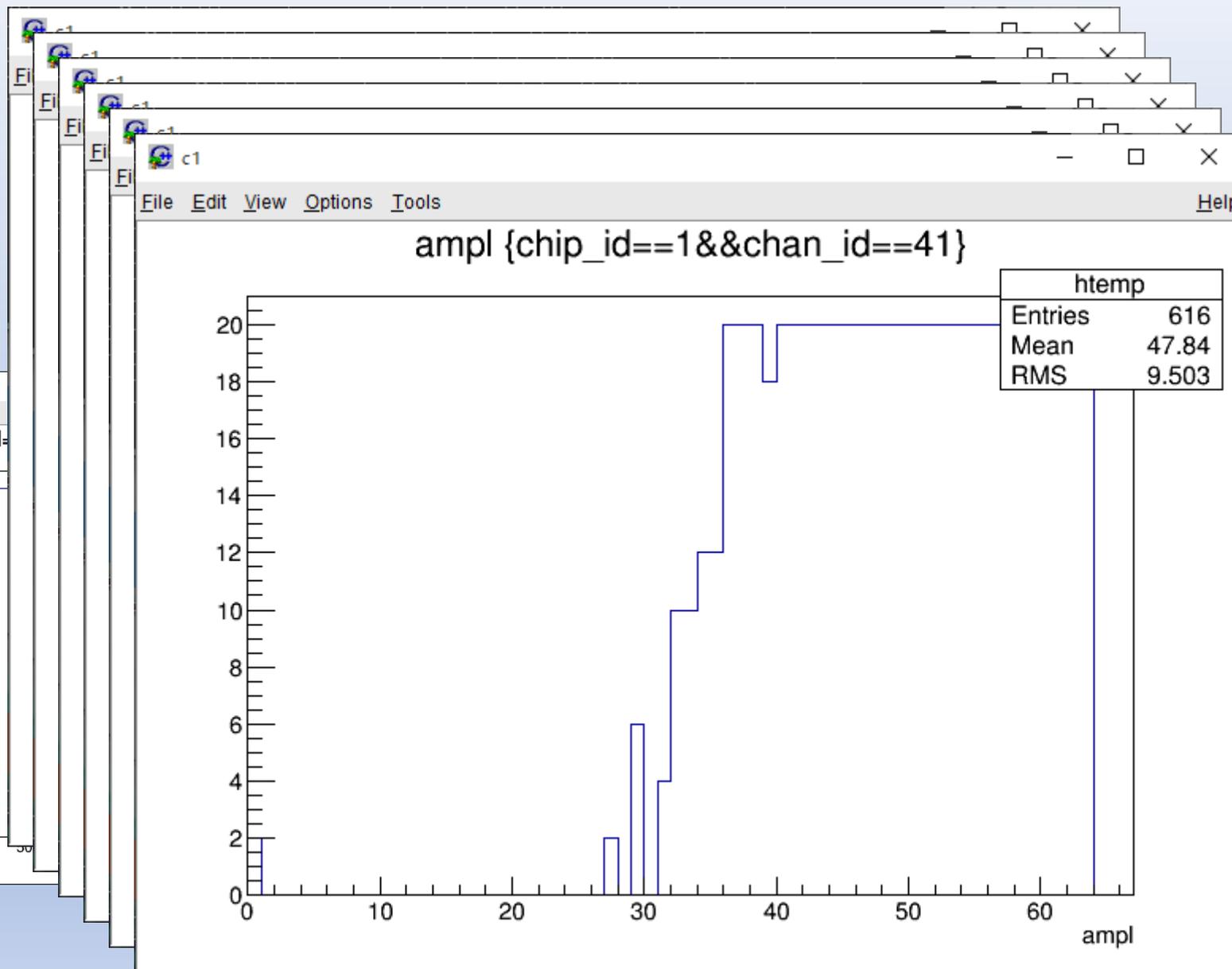
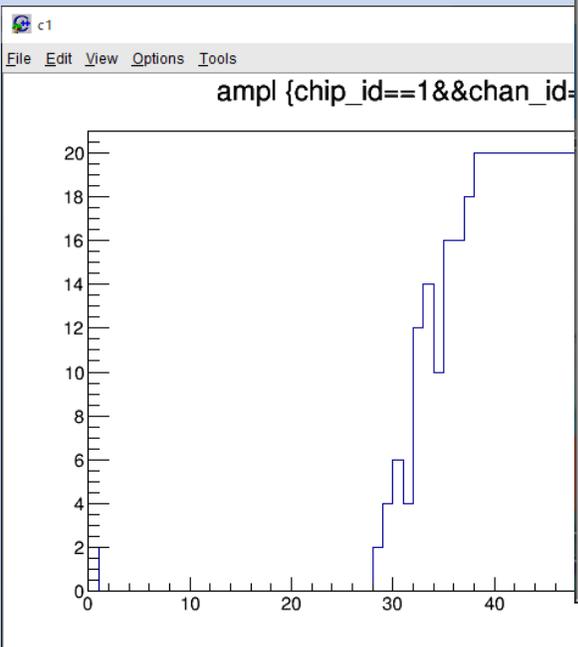


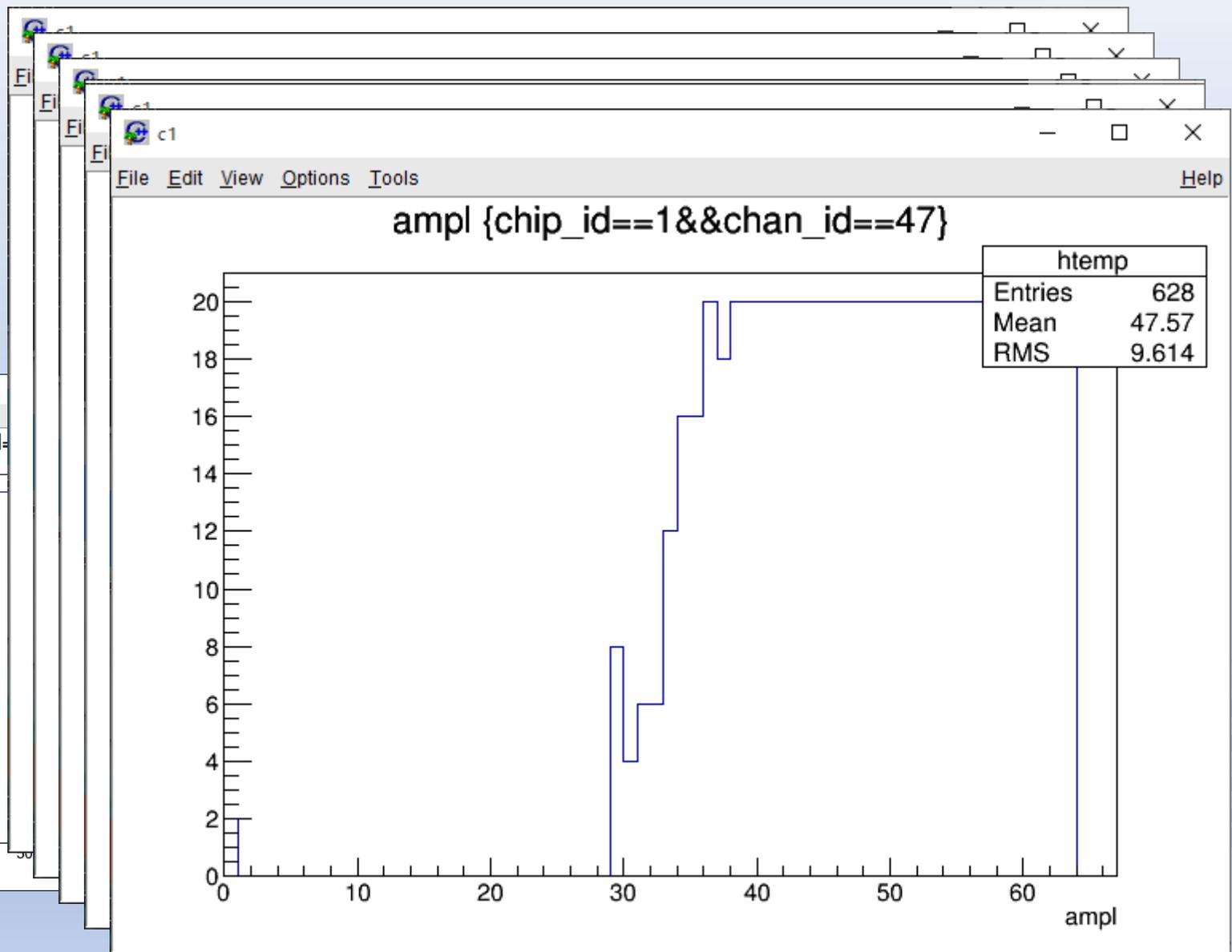
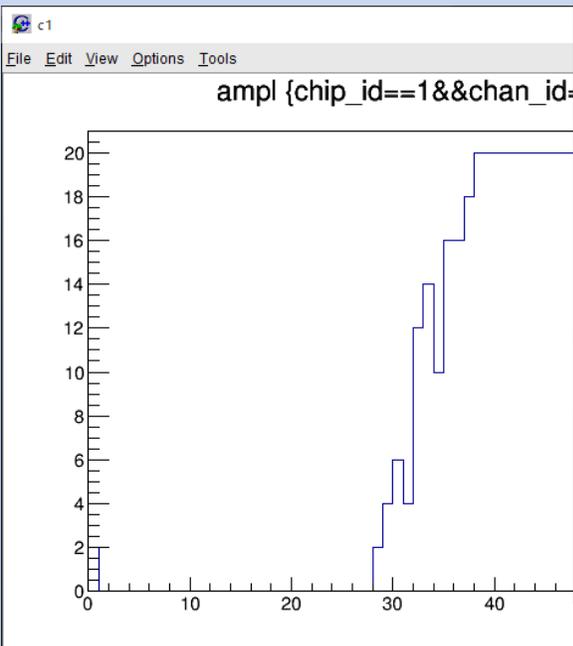


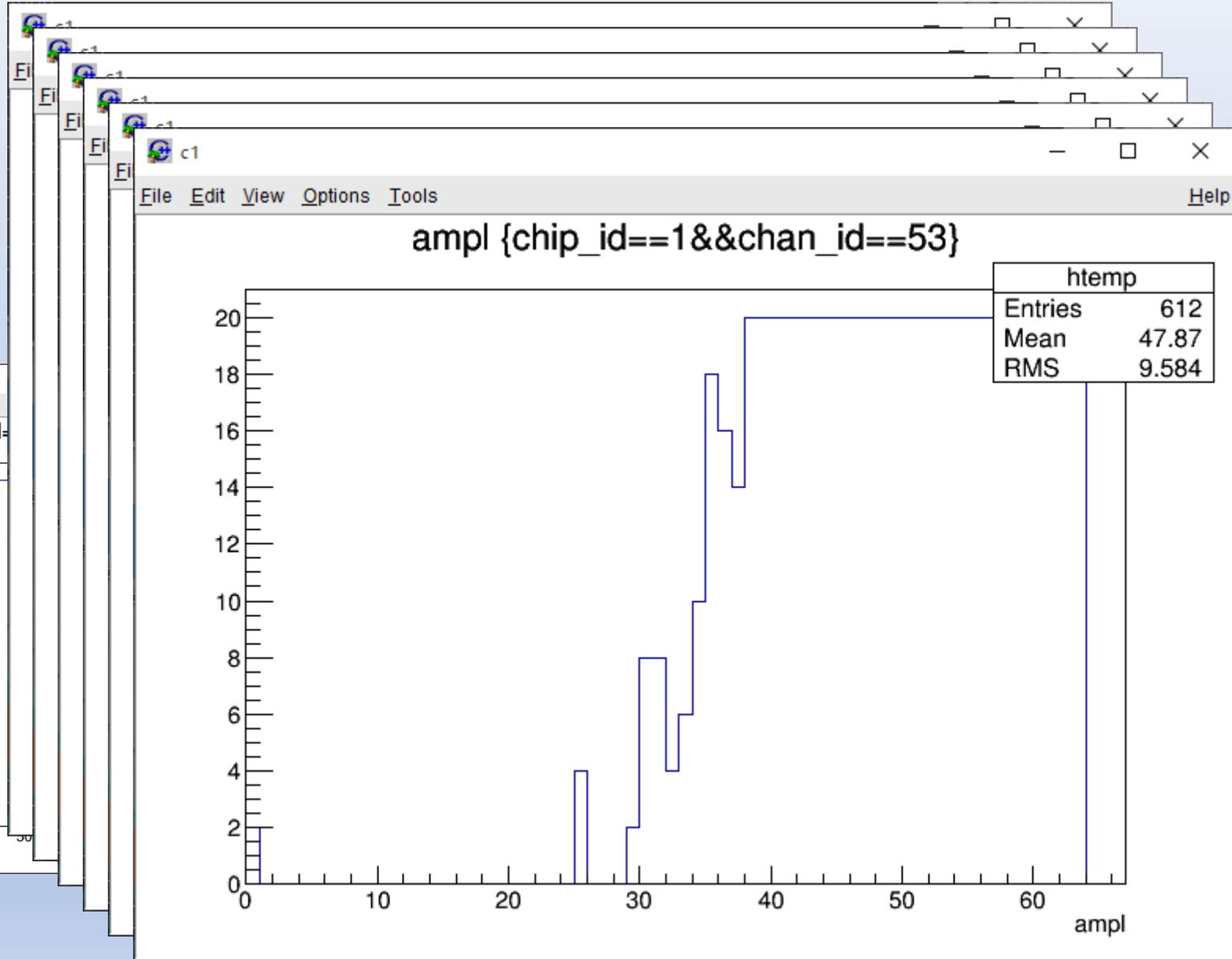
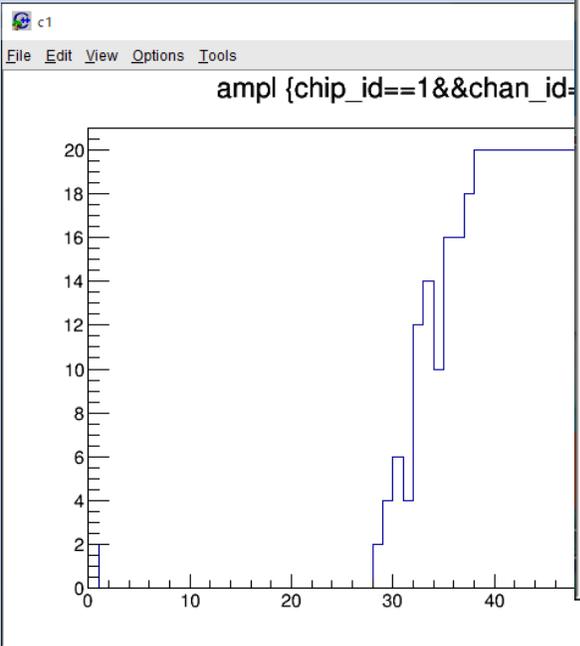


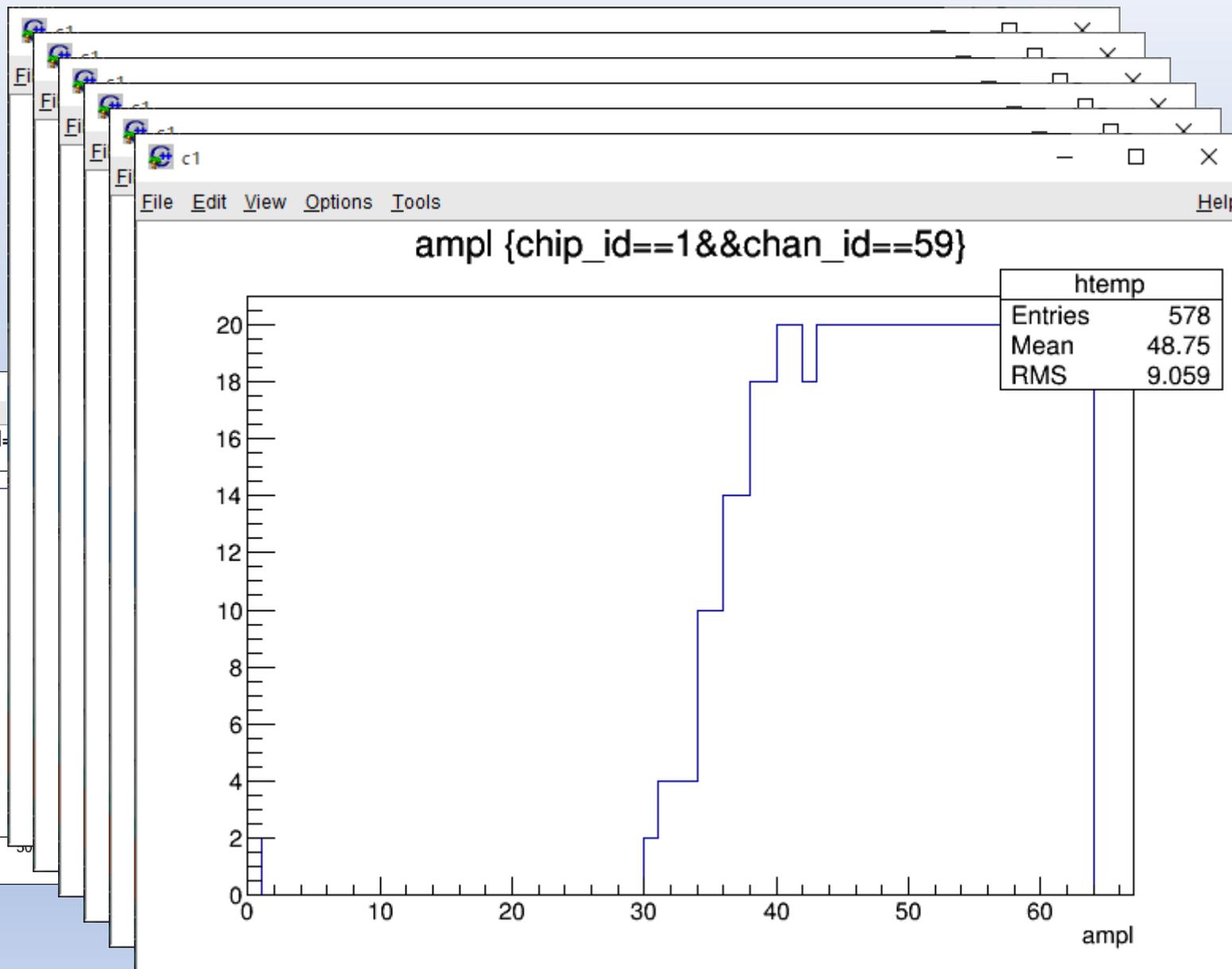
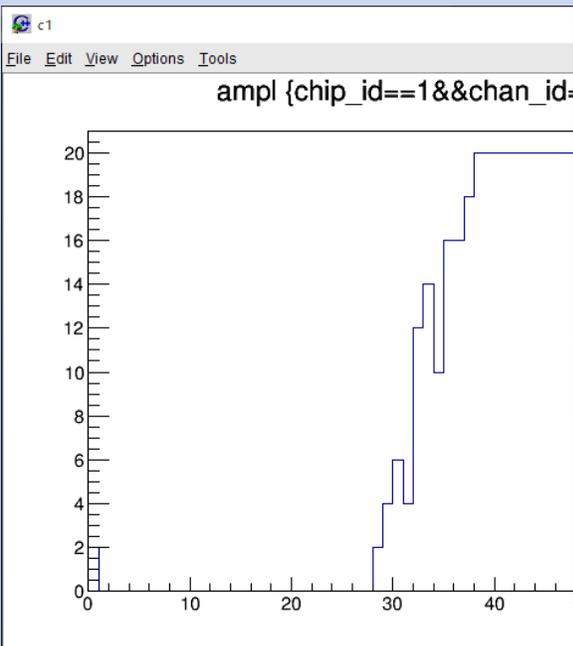


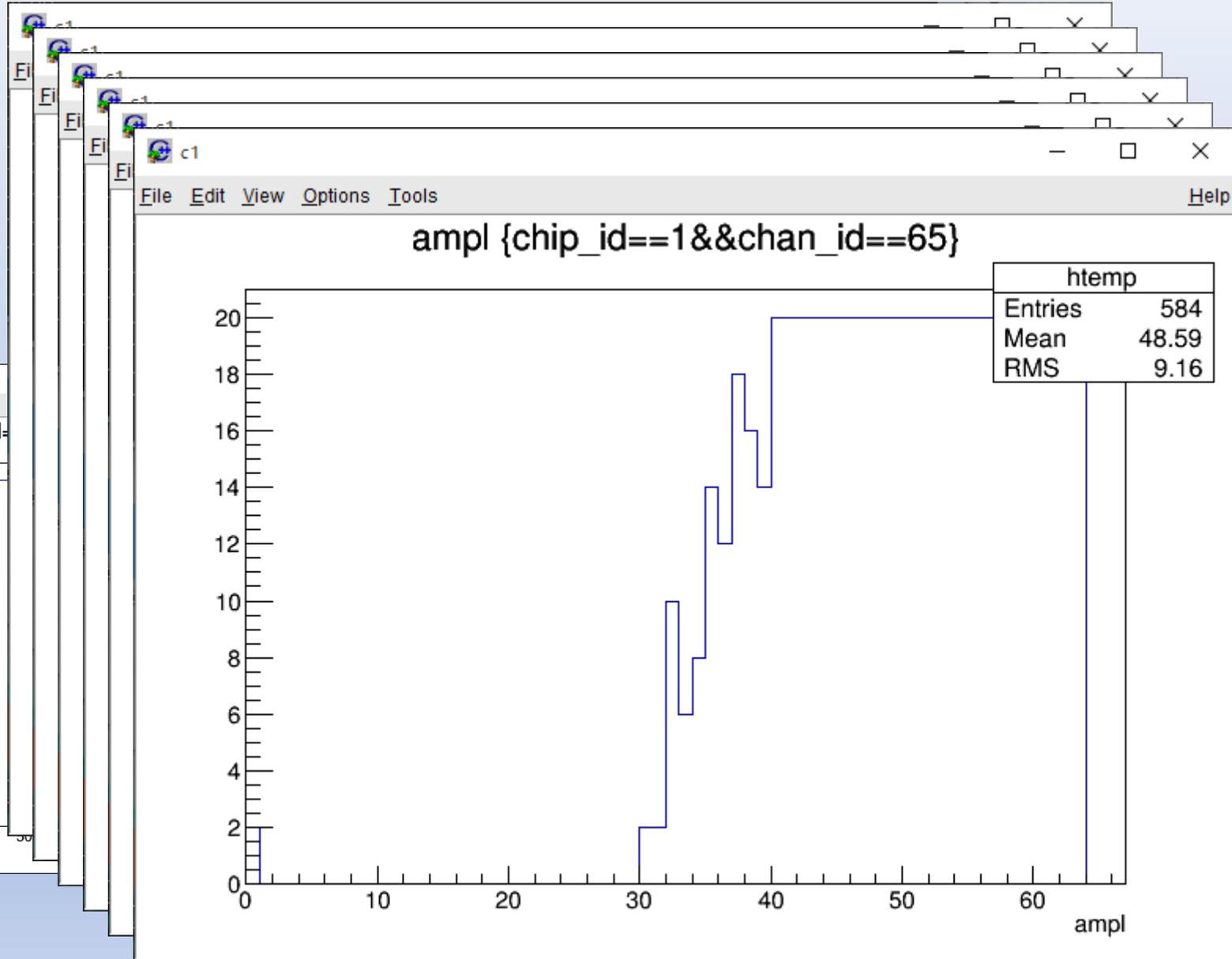
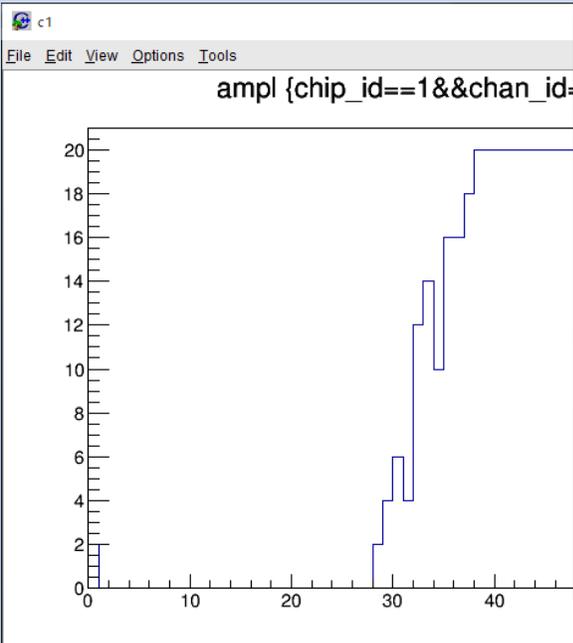


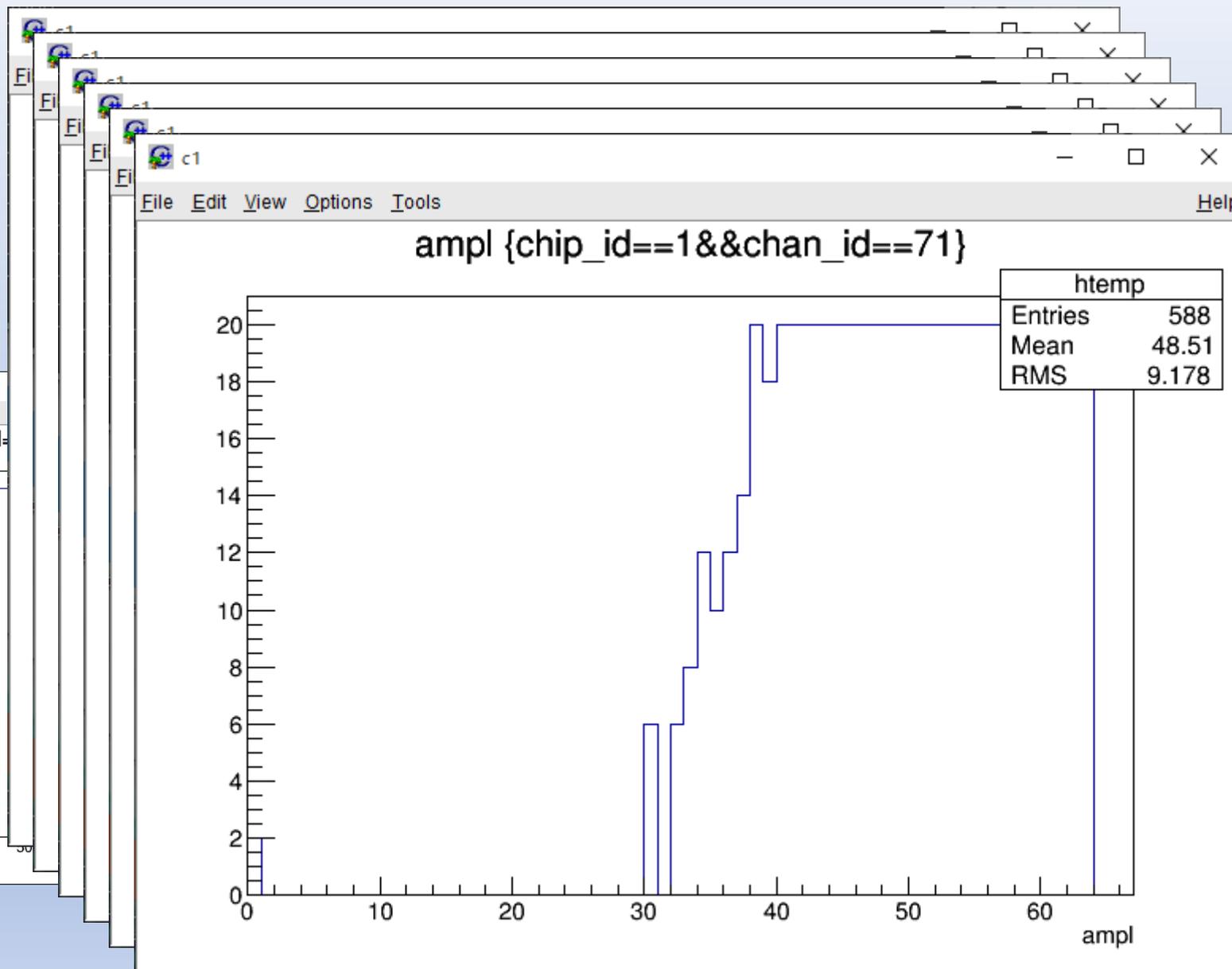
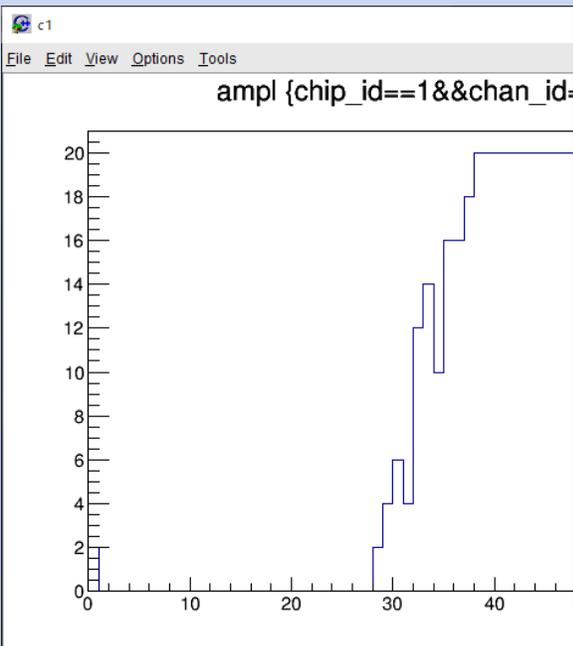




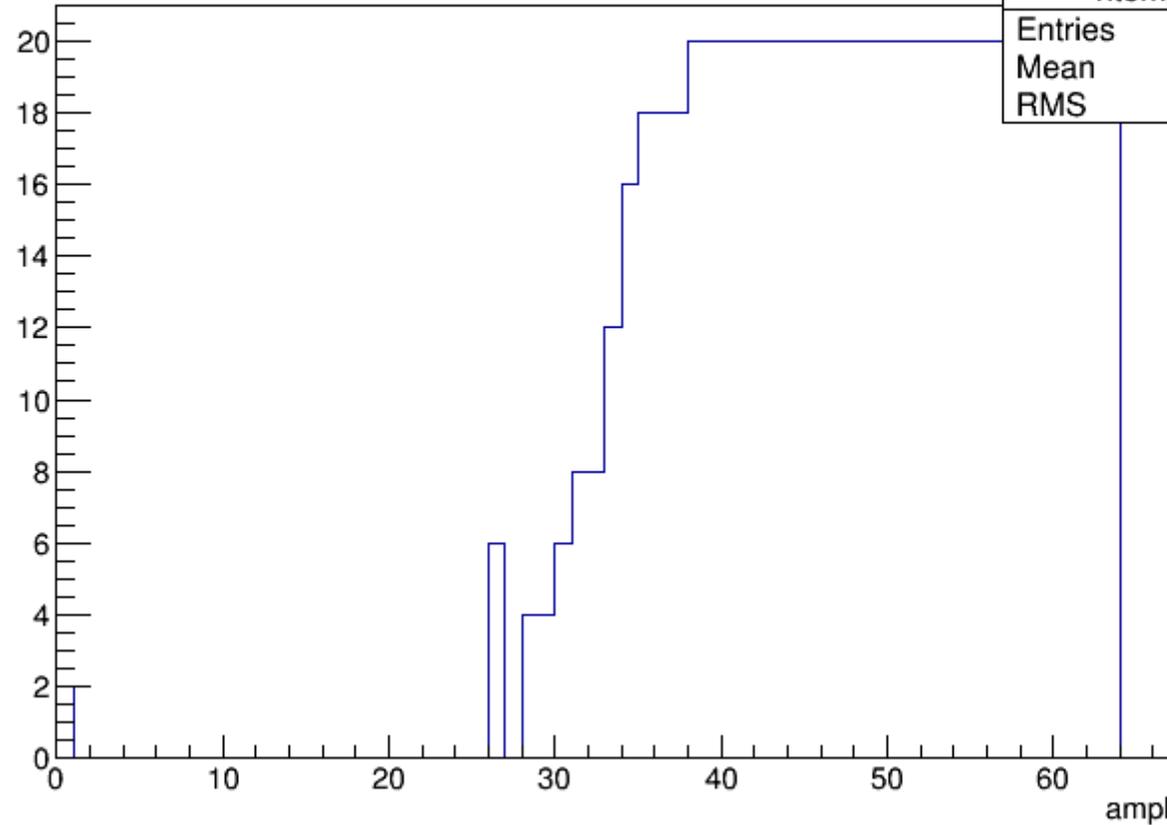








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