

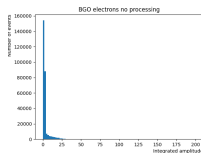
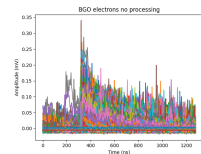
# First look at BGO test beam data

06/06/25

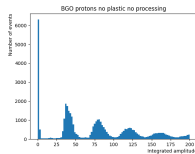
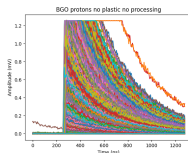
# Data set

- 3 data sets : Electron, Proton, Proton with CD case

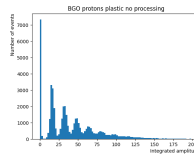
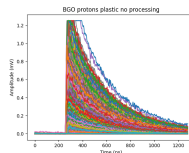
Electron  
Source, bad wavecatcher  
configuration



Proton  
ALTO



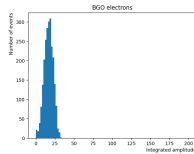
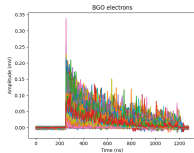
Proton with CD cases  
ALTO



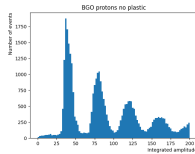
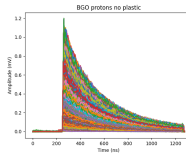
# Pre processing

- Preprocessing : Pedestals, Re-timing, cuts on min and max amplitude

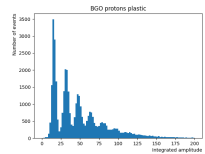
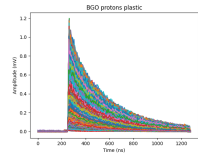
Electron



Proton

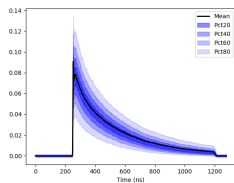


Proton with CD case

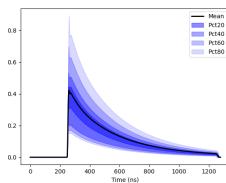


# Computation of the mean value

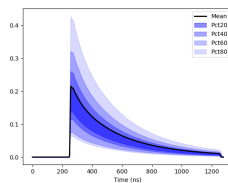
Electron



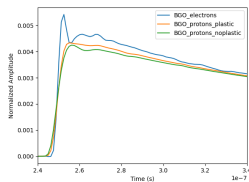
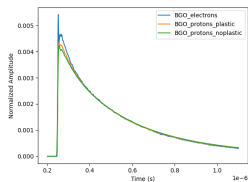
Proton



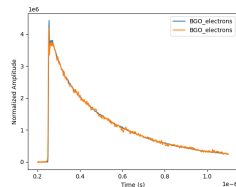
Proton with CD case



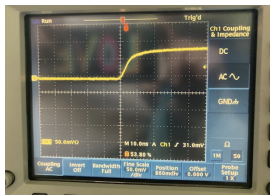
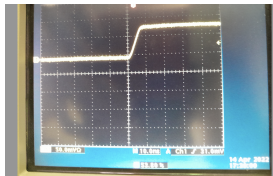
# Curves comparisons



Comparison between  
electron data with  
wavecatcher and  
oscilloscope

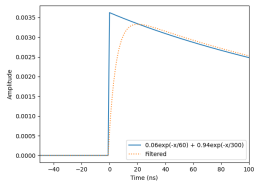
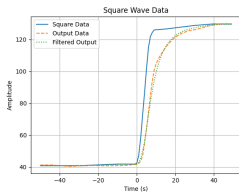


## Cable effect



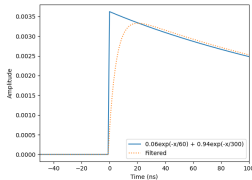
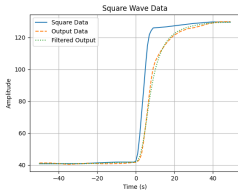
- ▶ A 6ns rise pulse sent thorough the cable.

# Cable effect



- Try to model it with a first-order low-pass filter
- Limited by the 6ns rise time

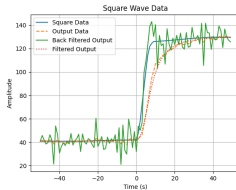
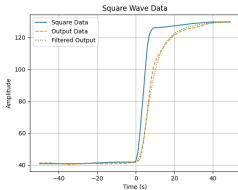
# Cable effect



- Try to model it with a first-order low-pass filter
- Limited by the rise time



# Cable effect



- Inverting the filter is not as easy as inverting the equations
- Need to cut high frequencies