Current status of external test pulse equalization

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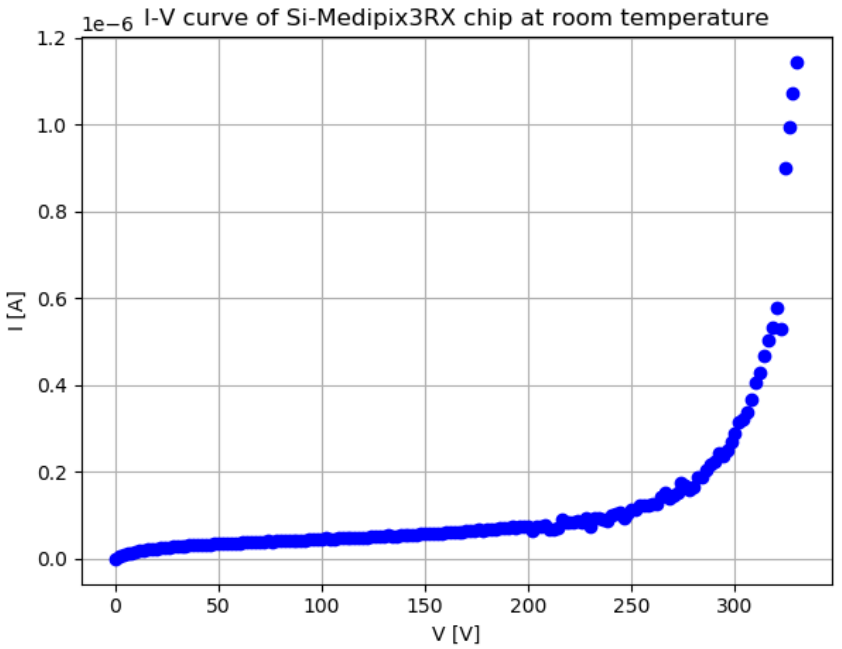
RIS3CAT project meeting

Introduction

IV Curve

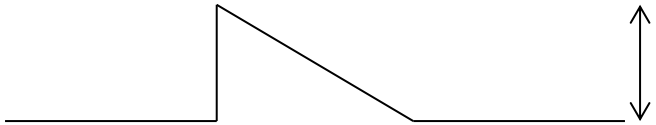


Chip in study

Type	Wafer	ID
Medipix3RX	Silicon	7FB1FE72

External test pulses

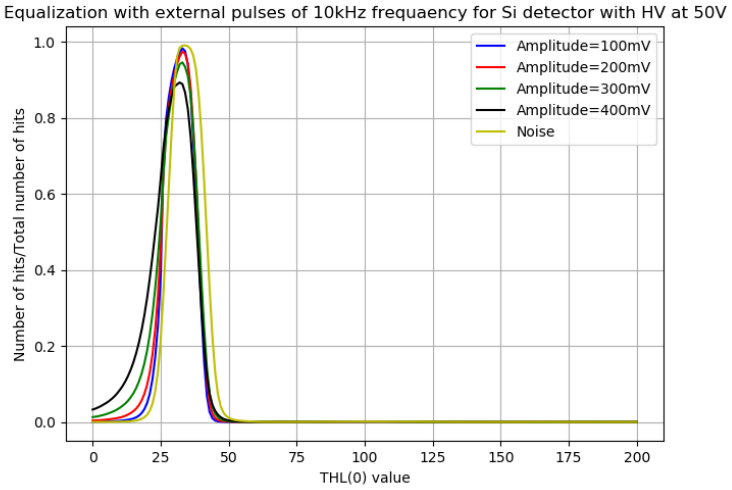
Type of pulses:

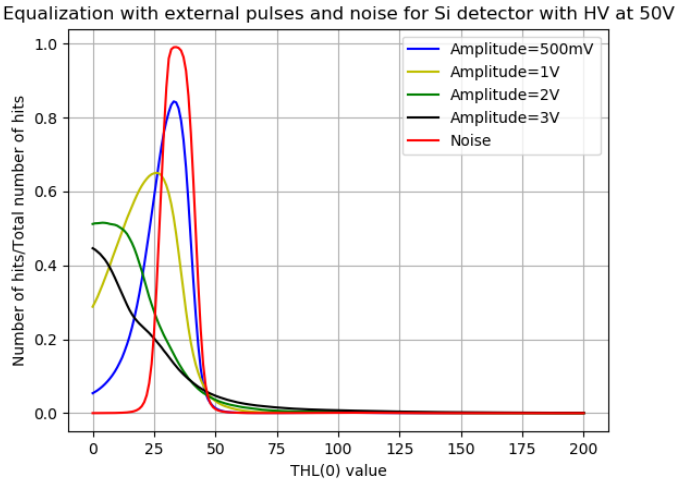


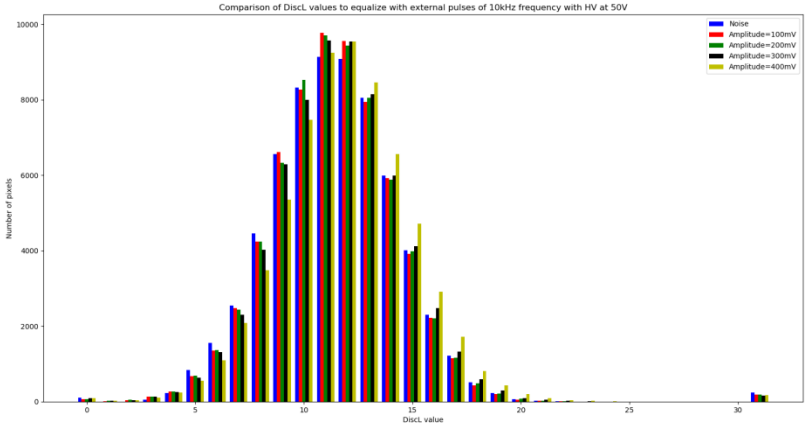
Amplitude= 0.1, 0.2, 0.3, 0.4, 0.5, 1, 2, 3 V

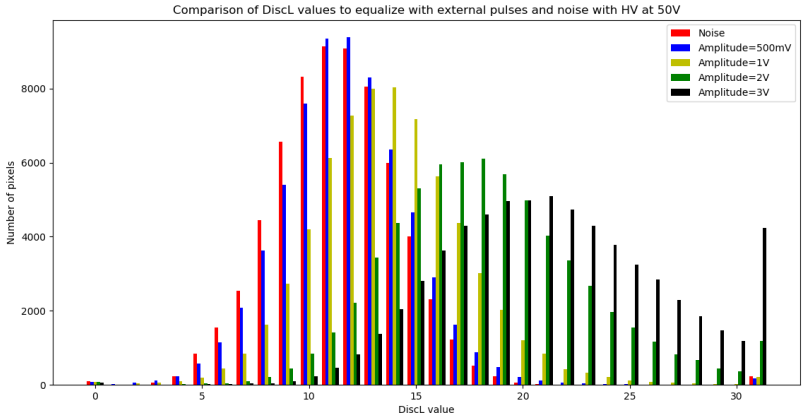
External test pulses

Variation of the amplitude:



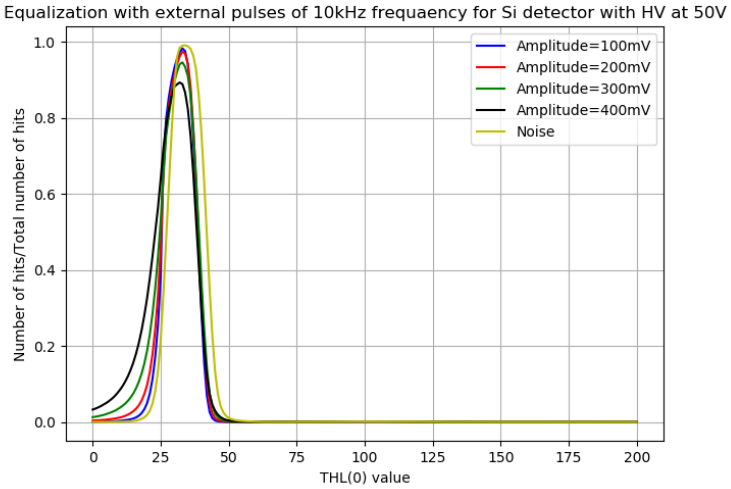


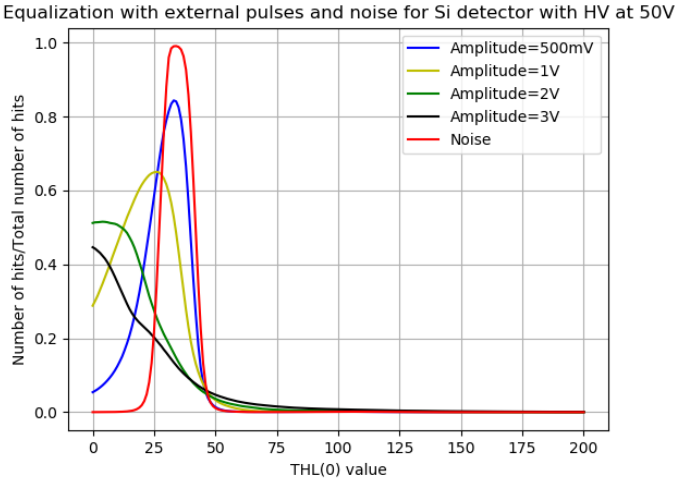




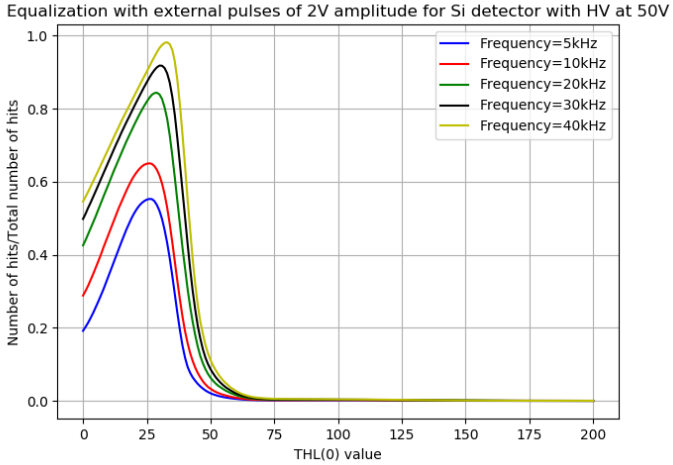
External test pulses

Variation of the amplitude:



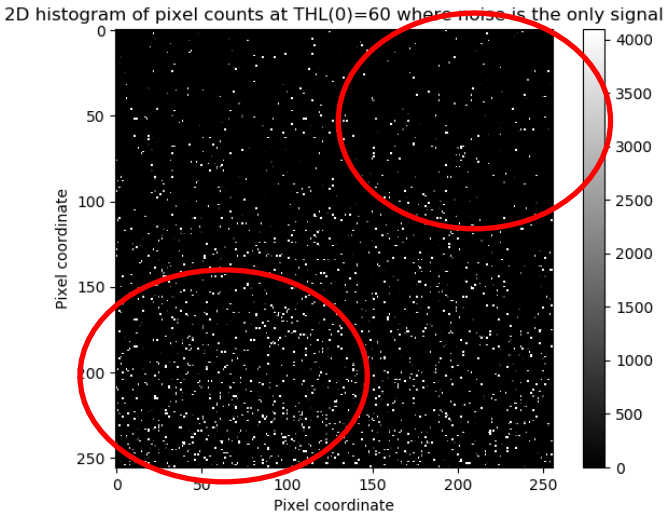


Variation of the frequency:



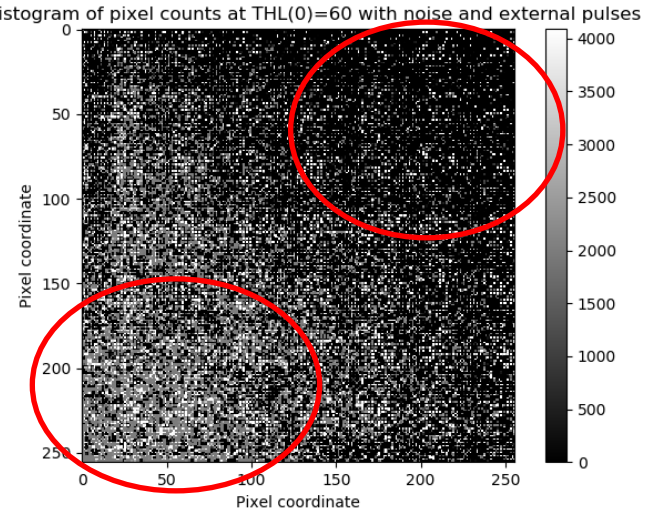
External test pulses: Problems

Acquisition with noise



Same regions and shapes!

Acquisition with external pulses and noise



The problems may come from:

- Chip
- Injection of the pulses

→ Comparing both acquisitions the problem may be on the chip! (difference in the bump bonds, …)

External test pulses: Problems

Acquisition with external pulses and noise