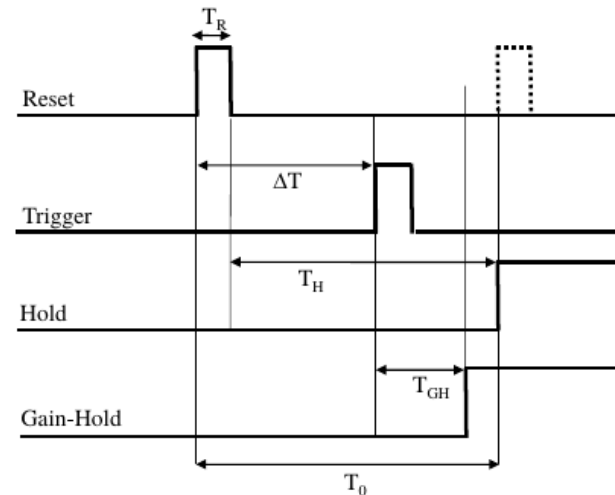


New configuration of the scolopendra

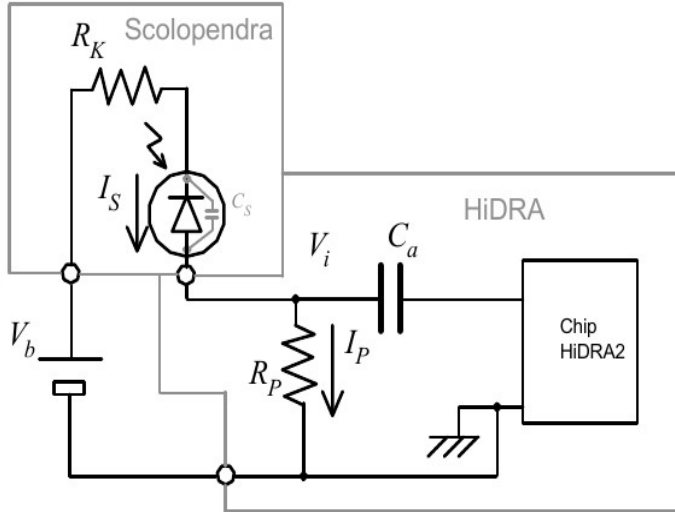
https://docs.google.com/document/d/1j4naJYLcq_apt7V6Fn4Tyh3mCR2d2uImZddfkg08e9A/edit#heading=h.lnndg4j1r58

Lorenzo, Seba, Raffaello, Eugenio, Sasha, ecc ecc....



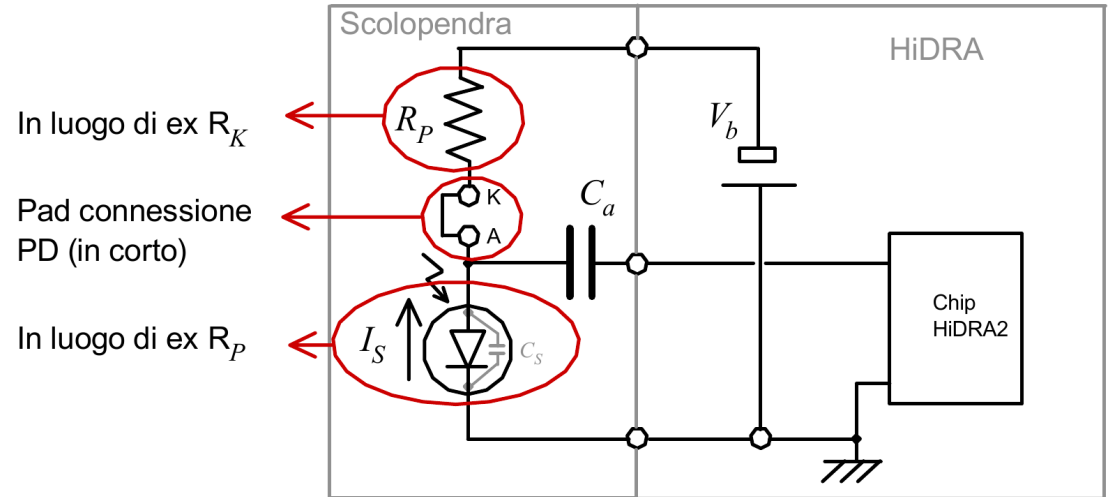
Introduction

OLD



Using $R_k=0$, R_p ?, C_a ?

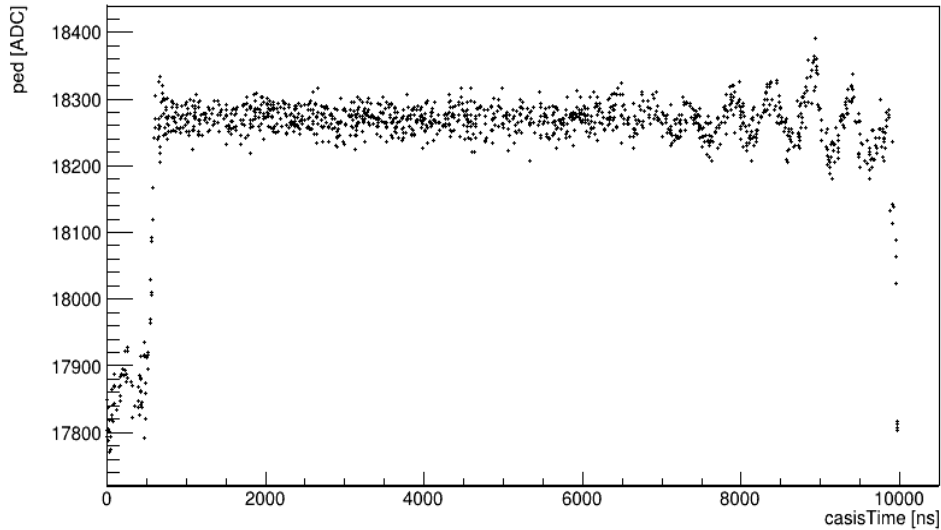
NEW



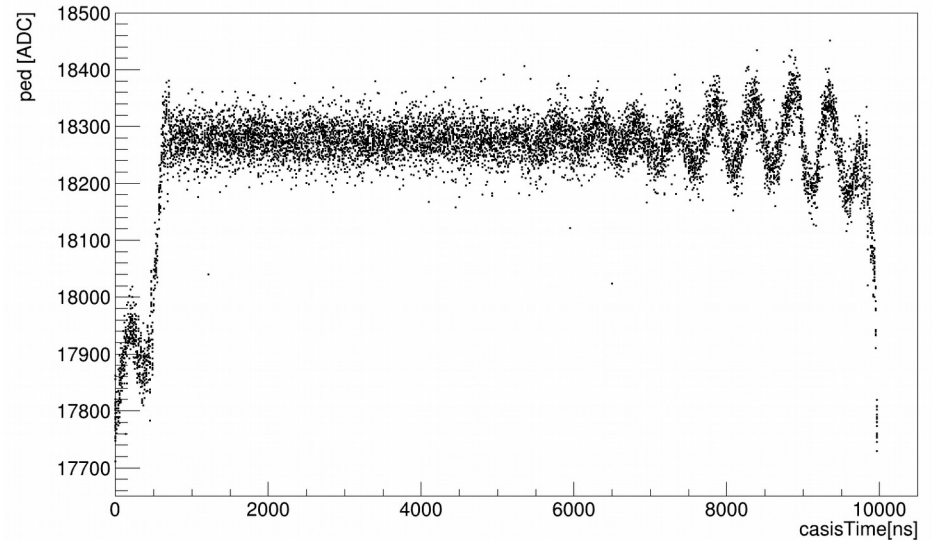
Pedestal vs casisTime

Using KEITHELY for the PD bias

Old scoLO config.



New scoLO config.

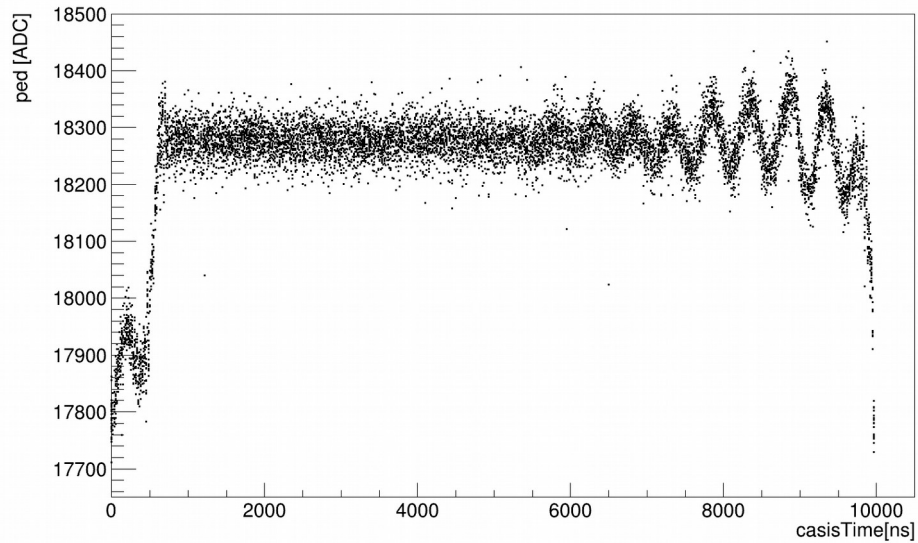


Pedestal oscillation is present with both the configurations, the proper noise (measure by selecting the “flat range”) is very similar ~ 25 ADC.

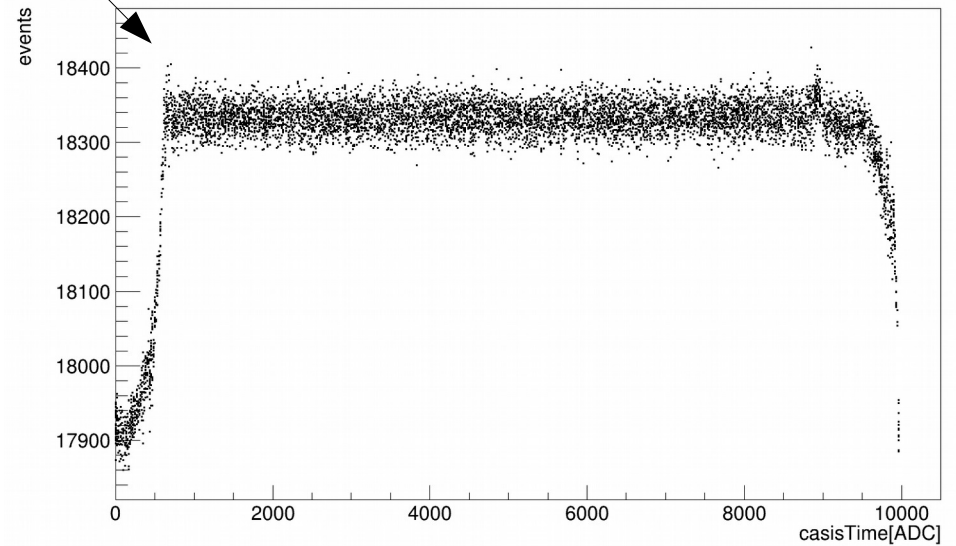
Pedestal vs casisTime

Using batteries for the PD bias

New scoLO config. with Keithely



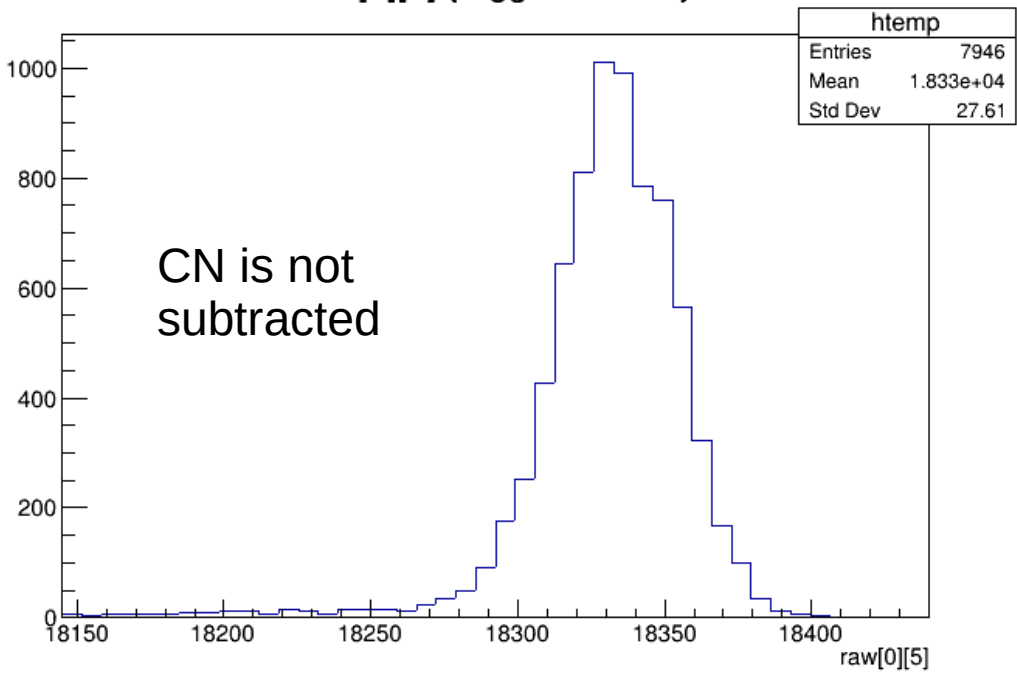
New scoLO config. with batteries



Noise with batteries

Using batteries for the PD bias

New scoLO config.

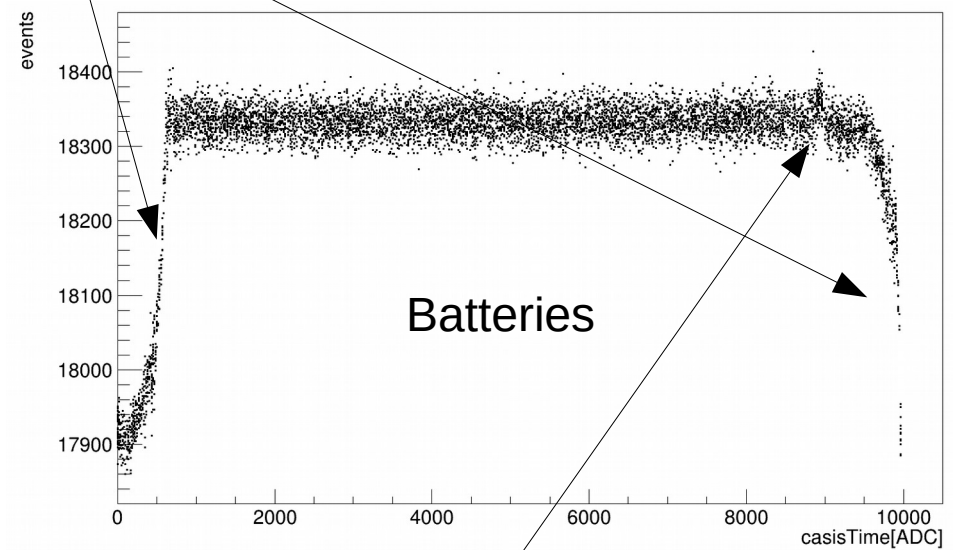
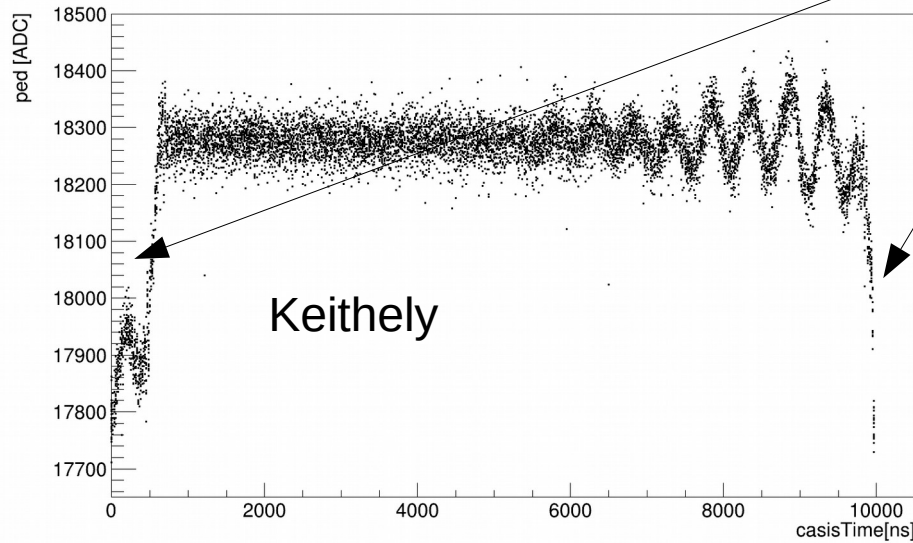


Old scoLO config.

??????

Edge of casisTime

Unexpected behaviors of the pedestal

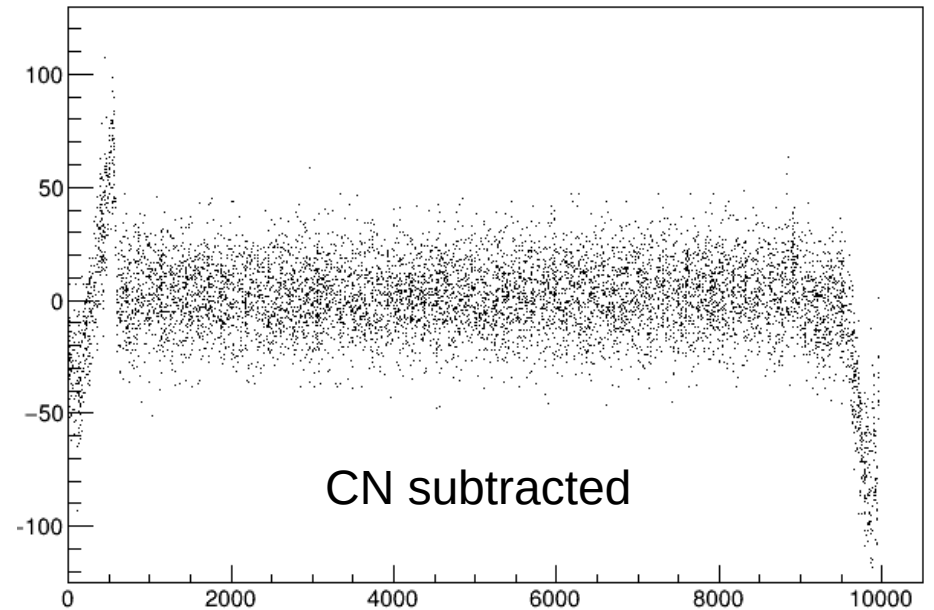
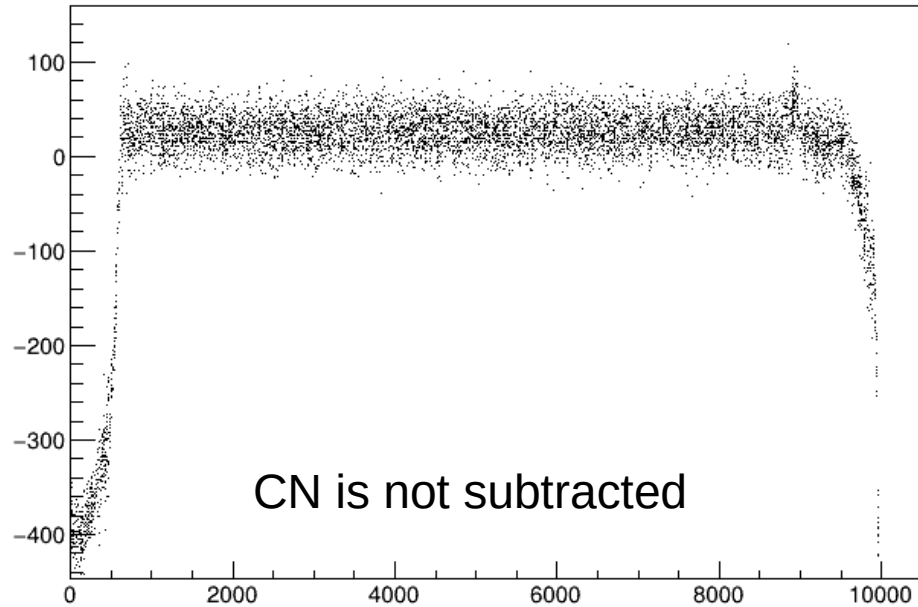


Strange peak correlated with the gHold

It is a new problem?

This problem was present in previous measurement but not in all the measurement,

This problem is somewhat “corrected” with the CN subtraction algorithm: thus we did not observe the problem before since I often use CN subtracted data.



Prospectives

- Compare new and old scolo config. noise using batteries.
- Understand the strange features of the pedestal vs casis Time
- Check if it is possible to use a different power supply instead of batteries
- Thursday 21: lab work with Zampa(s) in straming, to be discussed:
 - 1) Pedestal oscillation → we used the keithely with HIDRA1 board a we did not observed any pedestal fluctuation, something was changed?
 - 2) Pedestal problem for specific casisTime (start and end of the I.W., gHold)
 - 3) Time dependence of the LED (and MIP) signal with casisTime with and w/o Rk
 - 4) Any suggestions?