

VeloPix Fe55 threshold scan

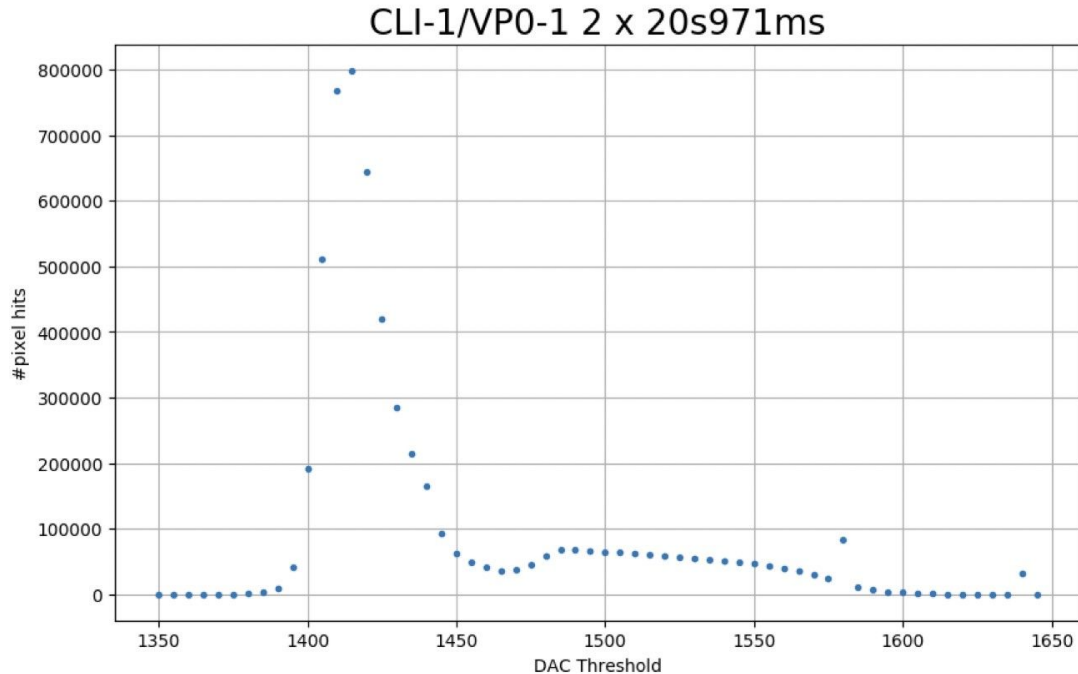
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Details

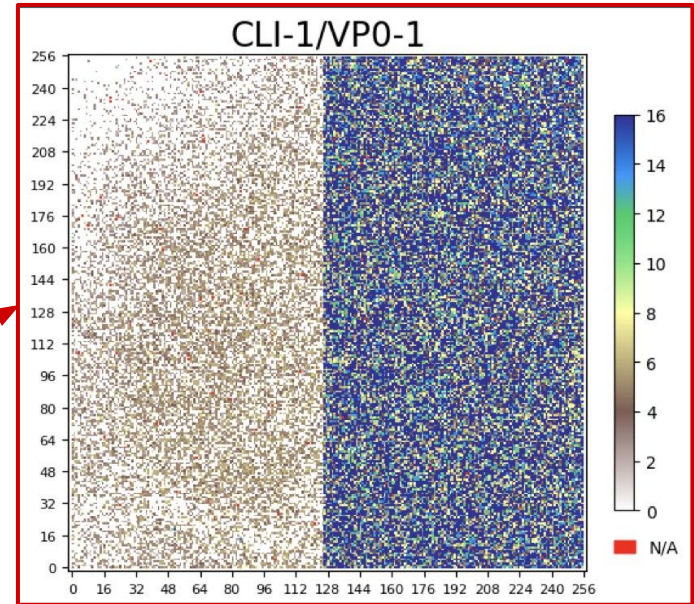
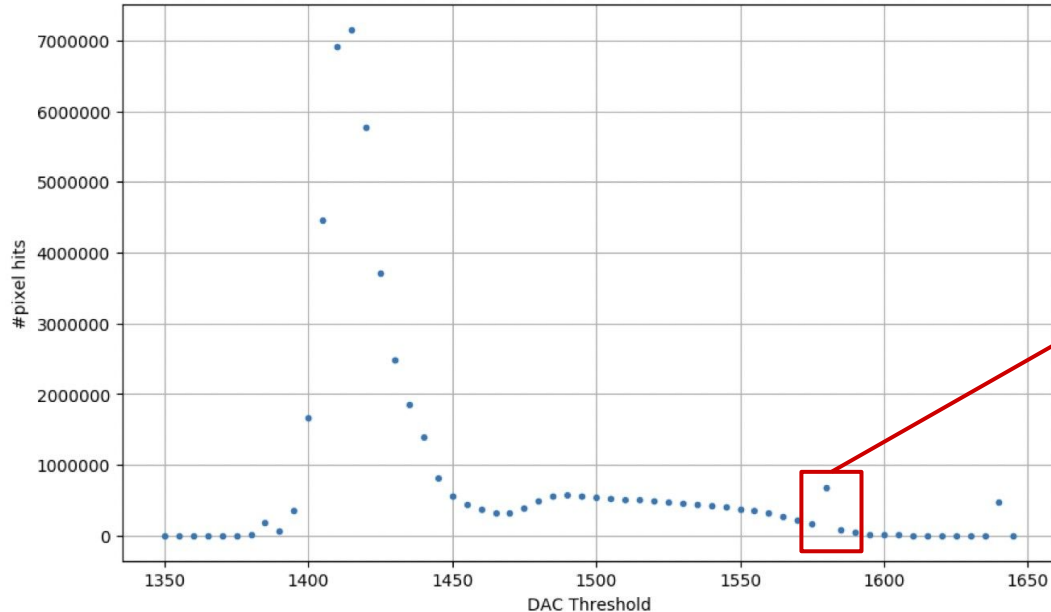
- › Fe55 source in front of VP0-1
- › Module N037 equalized as done during the module production.
We can't implement the same equalization at CERN without updating our setup
- › We use ECS data like in the equalization procedure.
We do not yet have the code to use analogue TP. Either we implement it ourselves, or we need to update the software to copy what CERN has already done.
- › We can't take acquisitions longer than ~30s because the shutter time register reaches the end of range. Therefore I'm taking more acquisitions of ~20s.

The threshold is changed in steps of 5 and the number of hits in the ASIC is measured.



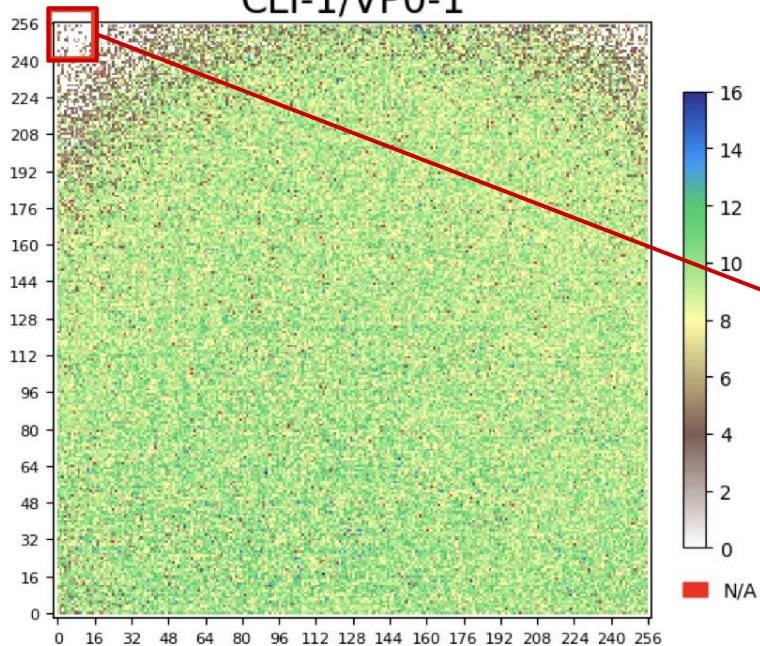
In some cases, half of the pixels behave strangely and the measurement has to be taken another time (this problem sometimes happens also during the equalization)

CLI-1/VP0-1 2 x 20s971ms

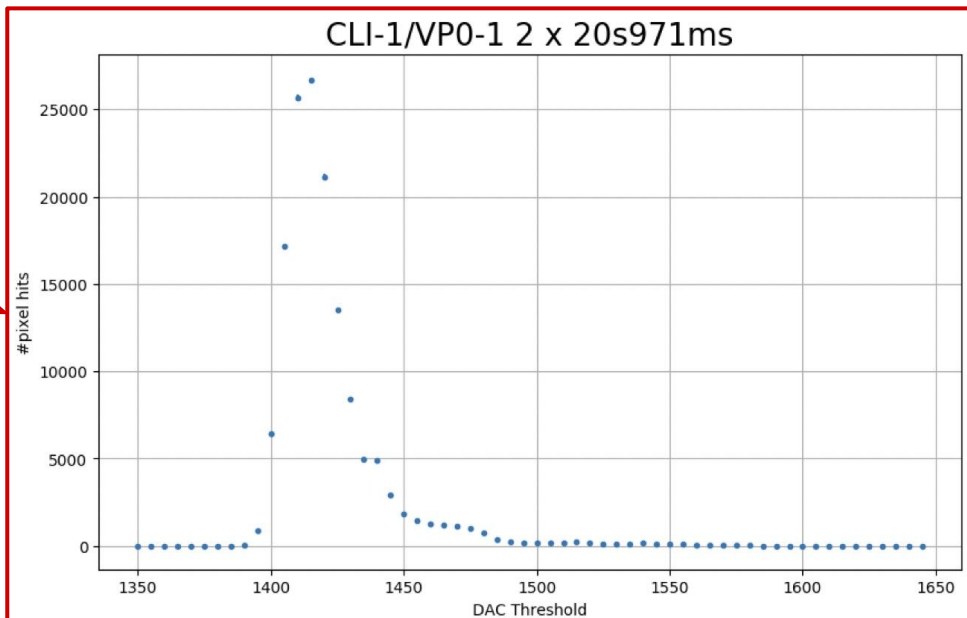


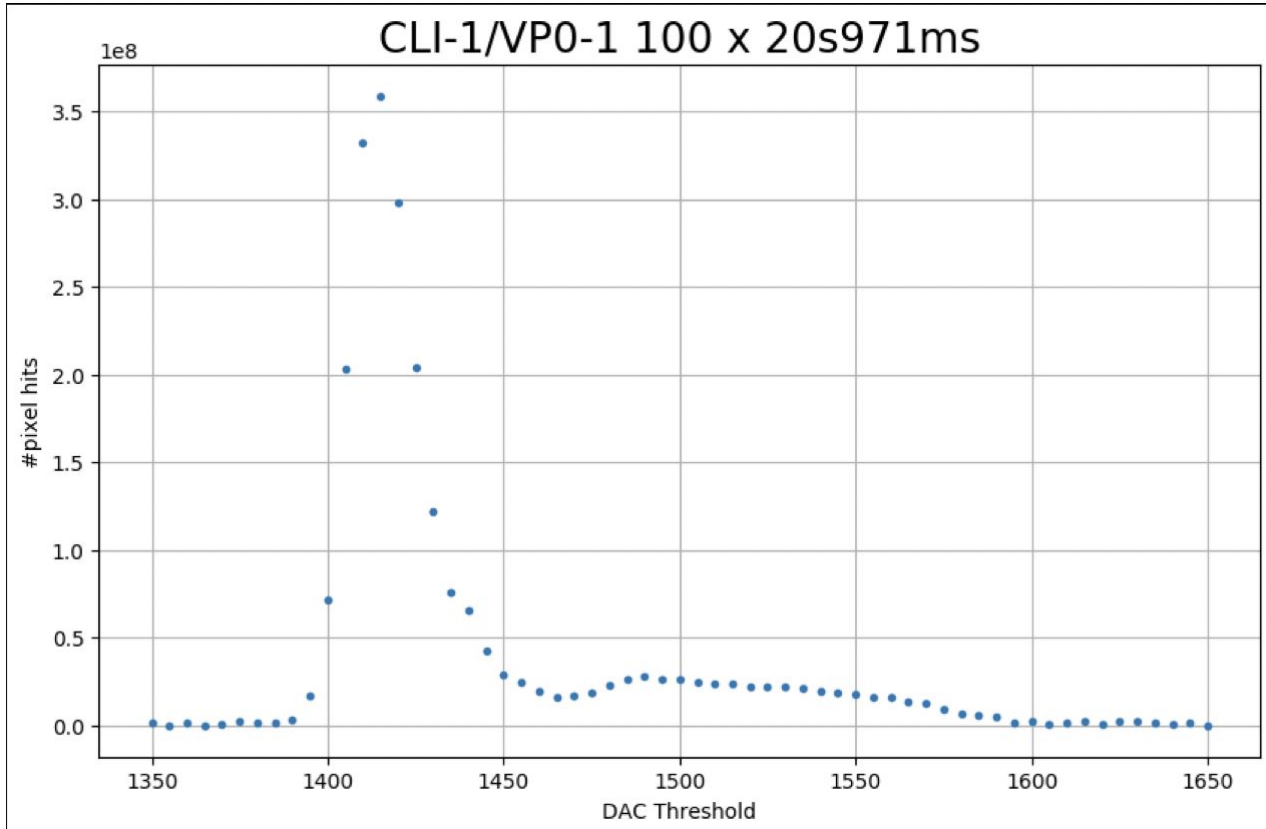
Check: looking at a region of the ASIC less hit by the Fe55 source should only give us noise

CLI-1/VP0-1

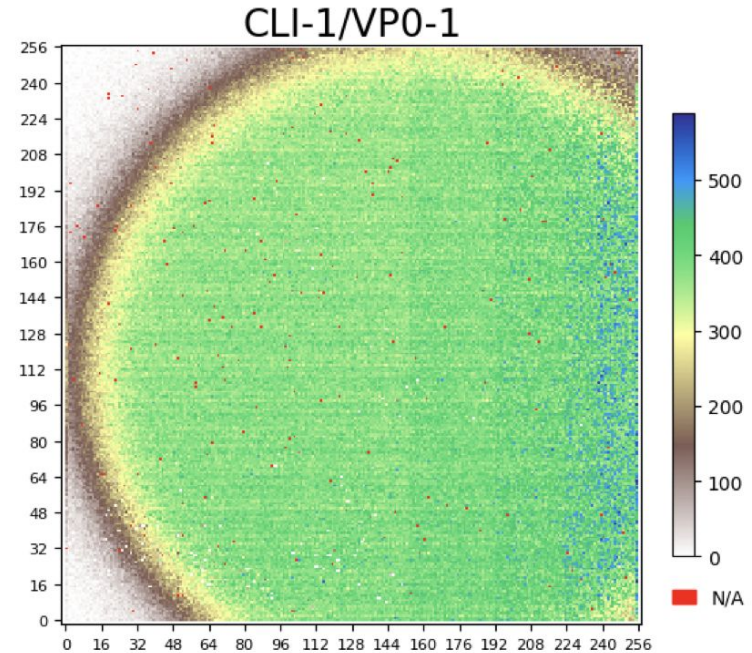
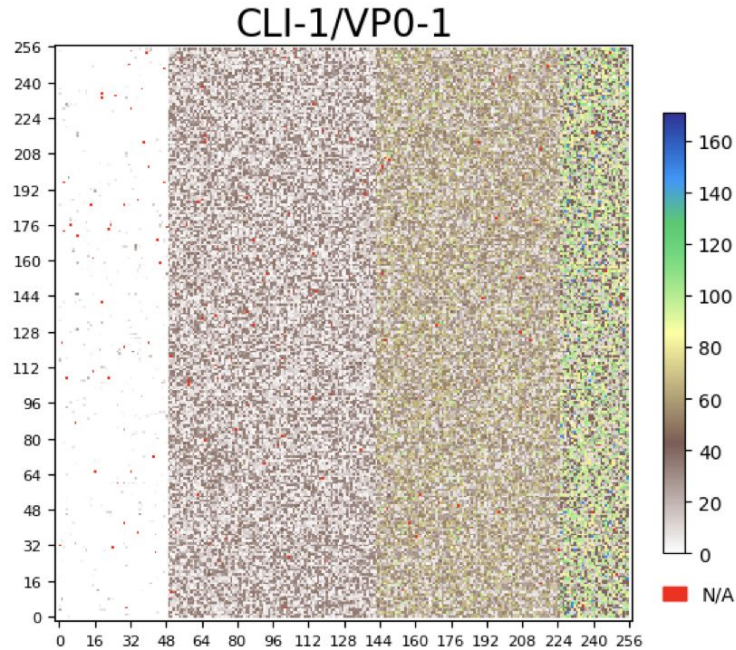


CLI-1/VP0-1 2 x 20s971ms





Still need to add a check to remove scans that produce this effect:



Then we can look at the single pixels.