/mnt/c/Users/client/Desktop/tesi/tesi/Analysis/W14R12/threshold scan/all norm/ 140/20221006 134455 threshold scan interpreted.h5 Chip = W14R12Script version = 9f88adb

IBIAS = 50, ITHR = 64, ICASN = 0, IDB = 100, ITUNE = 53, VRESET = 143, VCASP = 93, VCASC = 228, VCLIP = 255, VL = 2, VH = 140, ICOMP = 80, IDEL = 88, IRAM = 50

threshold scan

start column = 0, stop column = 224, start row = 0, stop row = 512, n injections

= 100, VCAL HIGH = 140, VCAL LOW start = 139, VCAL LOW stop = 1, VCAL LOW step =

-1

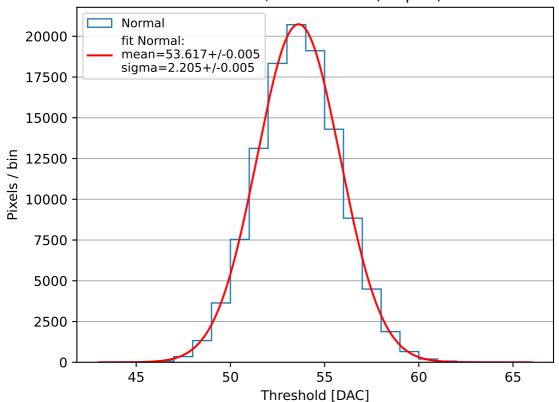


S-Curve (All FEs) VH = 140, VL = 139..1 (step -1) 1.4 105000 1.2 90000 1.0 75000 Occupancy Pixels / bin 8.0 60000 0.6 45000 0.4 30000 0.2 15000 0.0 15 30 45 60 90 105 120 135 75 Injected charge [DAC]

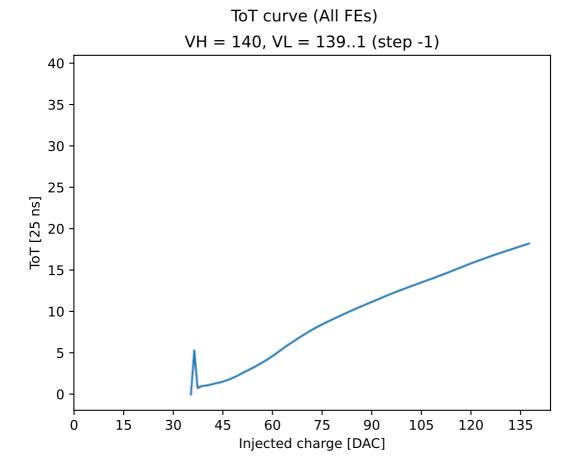
S-Curve (Normal) VH = 140, VL = 139..1 (step -1) 1.4 105000 1.2 90000 1.0 75000 Occupancy Pixels / bin 8.0 60000 0.6 45000 0.4 30000 0.2 15000 0.0 30 45 60 90 105 120 135 15 75 Injected charge [DAC]

## Threshold distribution

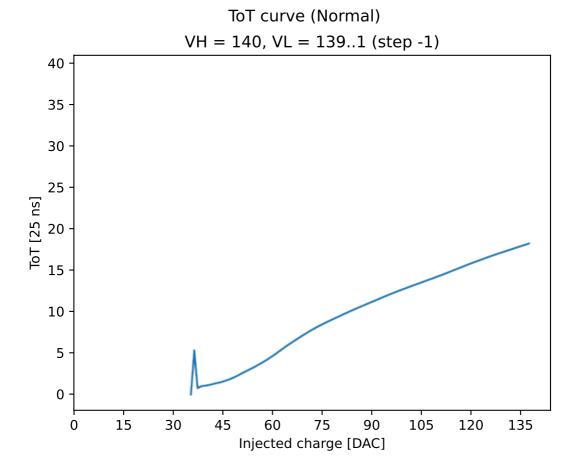
VH = 140, VL = 139..1 (step -1)



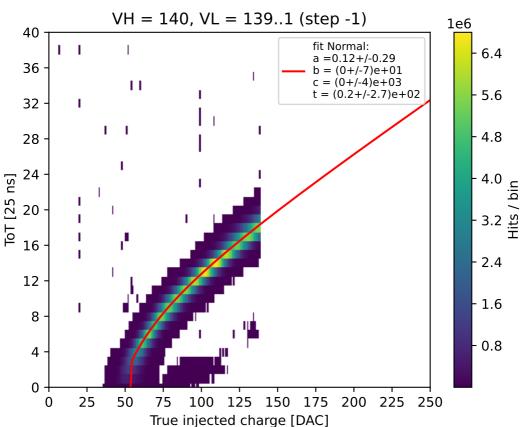
ToT curve (All FEs) VH = 140, VL = 139..1 (step -1) 1e6 120 6.4 105 5.6 90 4.8 4.0 Hits / bin 75 ToT [25 ns] 60 45 2.4 30 1.6 15 8.0 0 15 30 45 60 105 120 135 75 90 Injected charge [DAC]



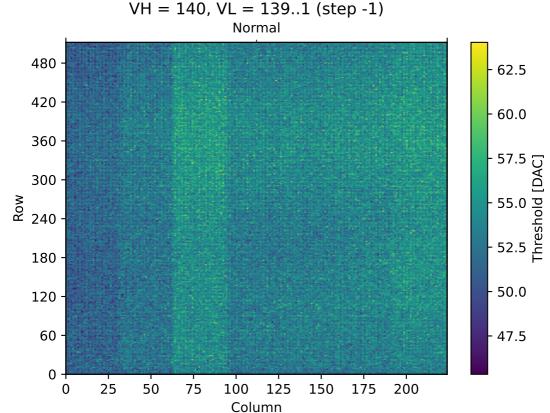
ToT curve (Normal) VH = 140, VL = 139..1 (step -1) 1e6 120 6.4 105 5.6 90 4.8 4.0 Hits / bin 75 ToT [25 ns] 60 45 2.4 30 1.6 15 8.0 0 15 30 45 60 105 120 75 90 135 Injected charge [DAC]



ToT curve fit



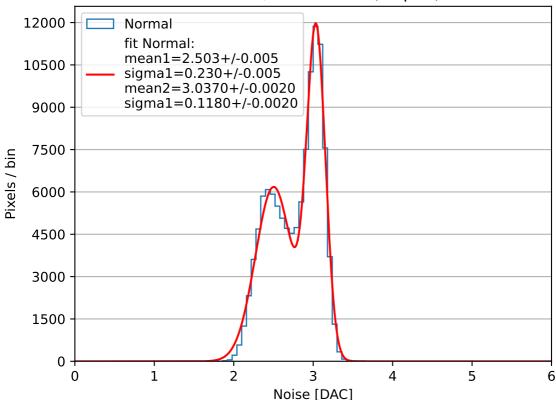
Threshold map



Noise distribution VH = 140, VL = 139..1 (step -1) Normal  $2.77 \pm 0.31$ Pixels / bin Noise [DAC]

## Noise distribution

VH = 140, VL = 139..1 (step -1)



Noise map VH = 140, VL = 139..1 (step -1) Normal 4.00 480 -3.75 420 -- 3.50 360 -- 3.25 300 -3.00 Row 240 -180 -- 2.50 120 -- 2.25 60 -2.00 0 25 50 75 100 125 175 200 0 150

Column

Noise map VH = 140, VL = 139..1 (step -1) Normal 4.00 480 -3.75 420 -- 3.50 360 -- 3.25 300 -3.00 Row 240 -2.75 180 -- 2.50 120 -- 2.25 60 -- 2.00 1.75 0 + 25 50 75 100 125 175 200 0 150

Column