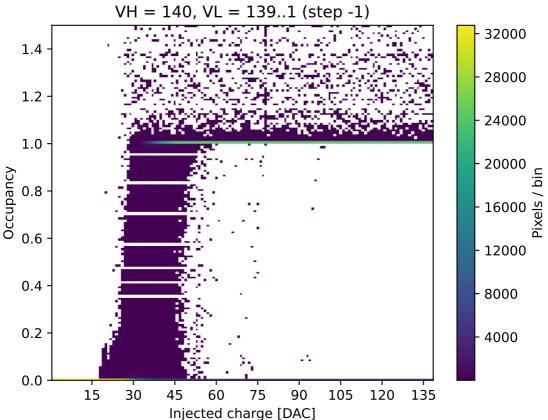
```
/mnt/c/Users/client/Desktop/tesi/tesi/Analysis/W14R12/threshold scan/all HV/140/
               20221007 100832 threshold scan interpreted.h5
                              Chip = W14R12
                          Script version = 13041b5
```

IBIAS = 60, ITHR = 30, ICASN = 8, IDB = 100, ITUNE = 53, VRESET = 100, VCASP = 10040, VCASC = 228, VCLIP = 255, VL = 2, VH = 140, ICOMP = 80, IDEL = 88, IRAM = 50 threshold scan start column = 448, stop column = 512, start row = 0, stop row = 512,

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

```
(483, 379) = 141.3, (483, 332) = 100.1, (483, 283) = 104.8, (480, 498)
                                = 104.3
 (480, 317) = 95.6, (494, 463) = 91.6, (493, 242) = 84.3, (491, 19) =
                                 71.8
(476, 24) = 59.4, (483, 340) = 58.2, (494, 442) = 57.7, (483, 2) = 49.9
 (479, 183) = 47.4, (474, 53) = 41.3, (481, 257) = 37.6, (476, 211) =
                                 34.9
(494, 482) = 33.6, (461, 126) = 29.3, (469, 372) = 25.4, (465, 302) =
                                 23.8
 (484, 461) = 23.1,
                    (467, 155) = 21.3, (468, 101) = 18.8, (467, 91) =
                                 18.7
 (493, 332) = 15.9, (487, 16) = 14.2, (495, 466) = 10.0, (487, 452) =
                                  9.8
 (465, 223) = 9.8, (480, 83) = 9.0, (492, 63) = 9.0, (471, 54) = 7.6
(489, 510) = 7.2,
                  (493, 327) = 7.1, (491, 240) = 7.1, (452, 248) = 6.9
 (473, 17) = 6.8, (464, 61) = 6.3, (495, 318) = 6.1, (481, 394) = 5.8
(487, 395) = 5.8, (471, 370) = 5.8, (483, 480) = 5.4, (481, 118) = 5.0
 (493, 117) = 4.7, (459, 79) = 4.5, (456, 363) = 4.4, (495, 93) = 4.4
(493, 105) = 4.2,
                  (491, 450) = 4.0, (483, 402) = 3.6,
                                                       (477, 378) = 3.4
(485, 491) = 3.3,
                  (493, 106) = 3.0, (483, 160) = 3.0,
                                                       (495, 279) = 2.9
 (491, 342) = 2.9, (494, 183) = 2.8, (489, 302) = 2.7, (481, 98) = 2.5
 (487, 292) = 2.5, (487, 78) = 2.4, (485, 221) = 2.1, (483, 223) = 2.0
(483, 330) = 2.0, (481, 200) = 2.0, (477, 175) = 2.0, (491, 414) = 1.9
(495, 340) = 1.9.
                  (489, 396) = 1.9,
                                     (480, 307) = 1.9.
                                                       (493, 470) = 1.9
 (491, 437) = 1.8, (483, 82) = 1.8,
                                     (473, 448) = 1.8.
                                                       (495, 46) = 1.8
(491, 120) = 1.7, (493, 402) = 1.7, (491, 328) = 1.7,
                                                       (495, 322) = 1.7
(489, 308) = 1.7.
                  (485, 440) = 1.6, (489, 334) = 1.6, (492, 171) = 1.6
(494, 467) = 1.6, (449, 474) = 1.6, (486, 309) = 1.5, (487, 377) = 1.5
(467, 359) = 1.5, (481, 332) = 1.5, (479, 228) = 1.5, (481, 108) = 1.5
(487, 312) = 1.5, (479, 434) = 1.4, (475, 501) = 1.4, (480, 424) = 1.4
 (494, 14) = 1.4, (483, 30) = 1.4,
                                    (487, 84) = 1.4, (489, 501) = 1.4,
```

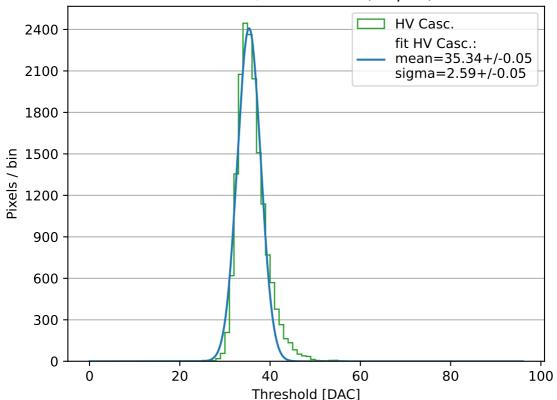
S-Curve (All FEs)



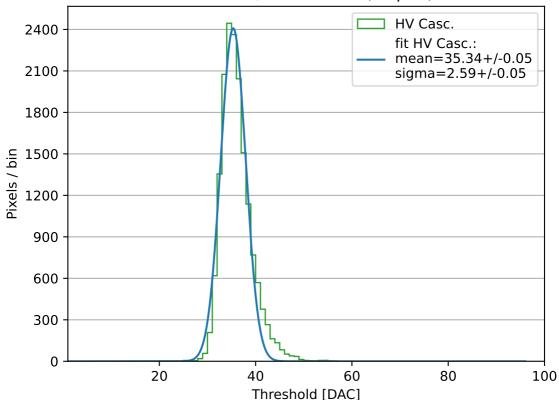
S-Curve (HV Casc.) VH = 140, VL = 139..1 (step -1) 16000 1.4 14000 1.2 12000 1.0 10000 Pixels / bin Occupancy 8.0 8000 0.6 6000 0.4 4000 0.2 2000 0.0 15 30 60 105 120 135 45 75 90 Injected charge [DAC]

S-Curve (HV) VH = 140, VL = 139..1 (step -1) 16000 1.4 14000 1.2 12000 1.0 10000 Pixels / bin Occupancy 8.0 8000 0.6 6000 0.4 4000 0.2 2000 0.0 30 15 45 60 90 105 120 135 75 Injected charge [DAC]

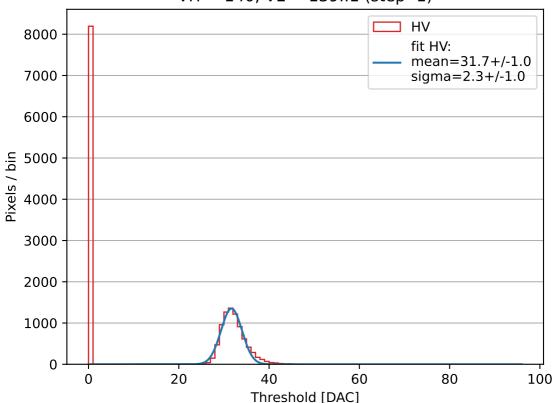
## Threshold distribution (HV Casc.)



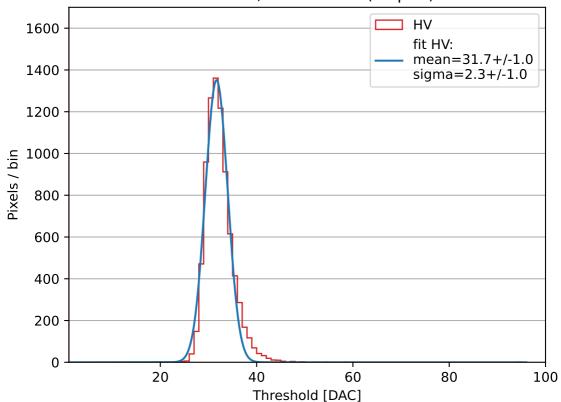
### Threshold distribution (HV Casc.)



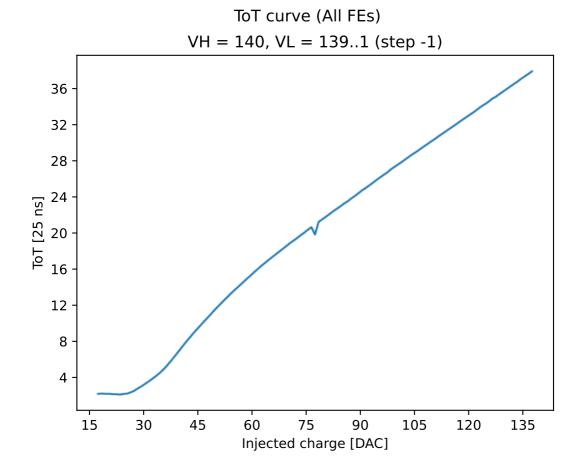
## Threshold distribution (HV) VH = 140, VL = 139..1 (step -1)

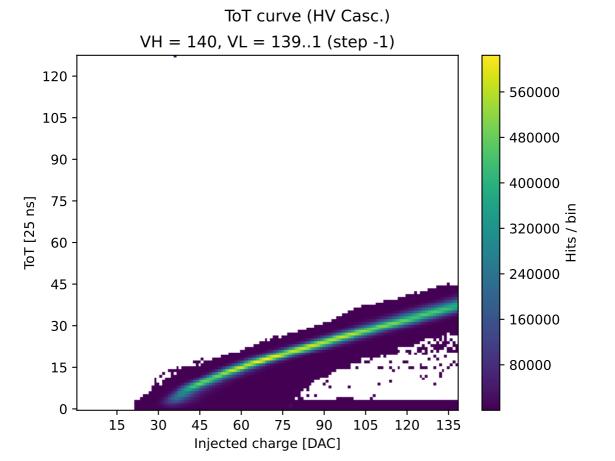


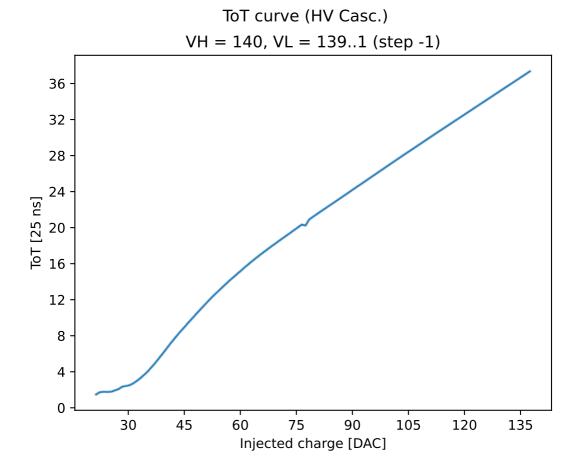
## Threshold distribution (HV)



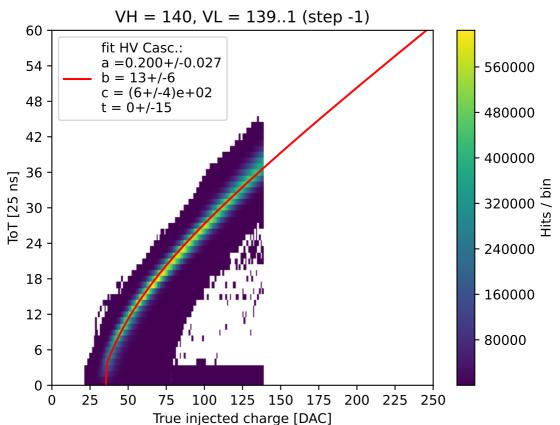
ToT curve (All FEs) VH = 140, VL = 139..1 (step -1) ToT [25 ns] Injected charge [DAC]

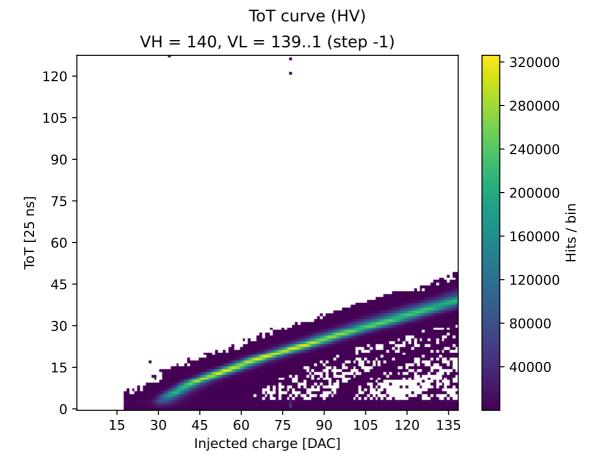


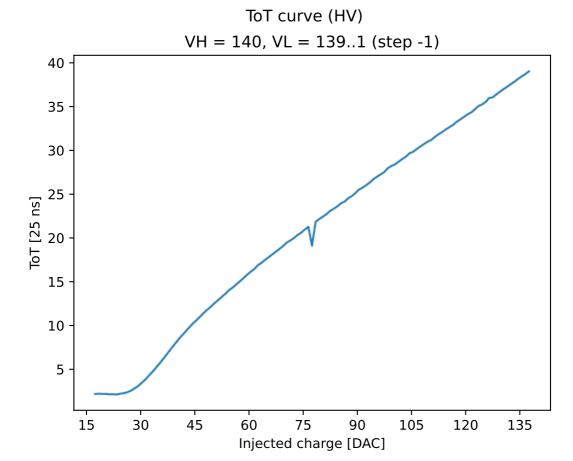




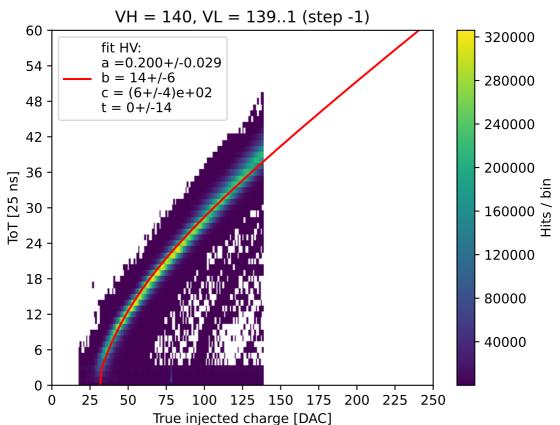
#### ToT curve fit (HV Casc.)



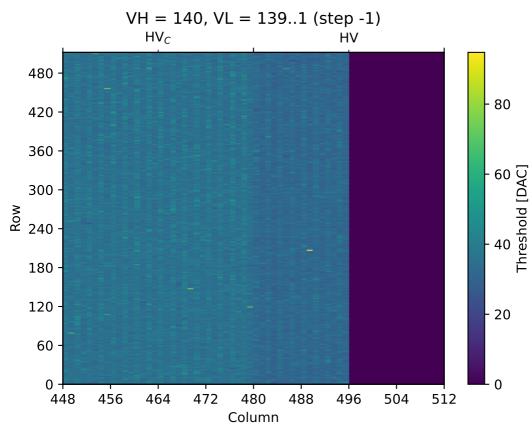




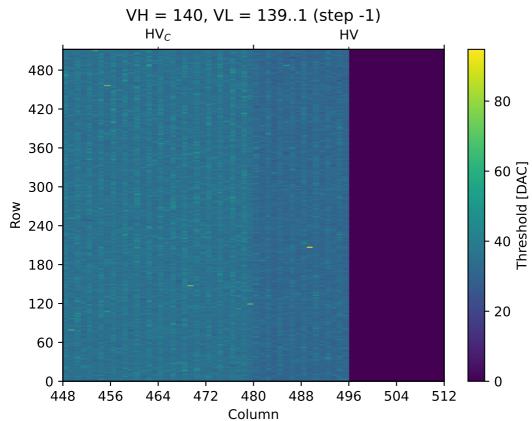
ToT curve fit (HV)



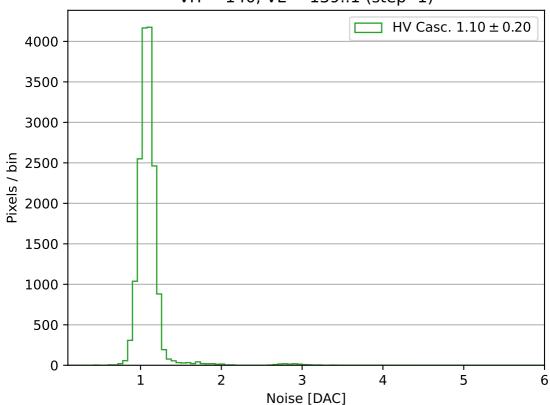
Threshold map



Threshold map

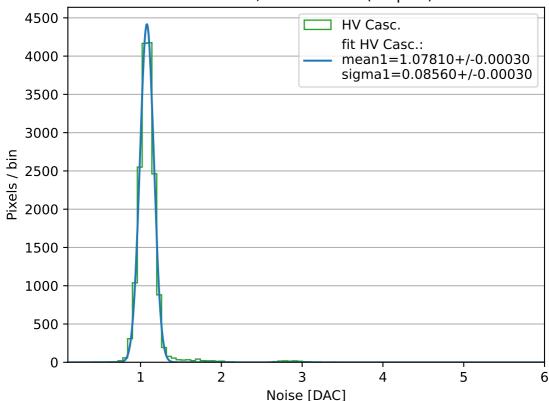


# Noise (width of s-curve slope) distribution VH = 140, VL = 139..1 (step -1)

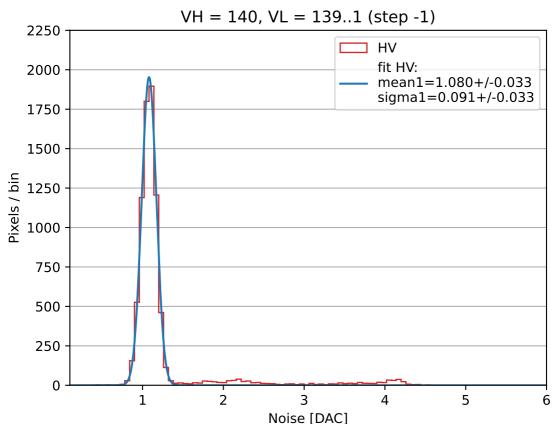


Noise (width of s-curve slope) distribution VH = 140, VL = 139..1 (step -1)  $HV 1.2 \pm 0.6$ Pixels / bin Noise [DAC]

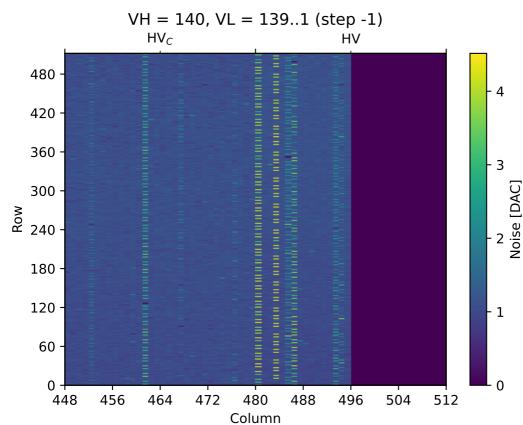
## Noise (width of s-curve slope) distribution



### Noise (width of s-curve slope) distribution



Noise (width of s-curve slope) map



Noise (width of s-curve slope) map

