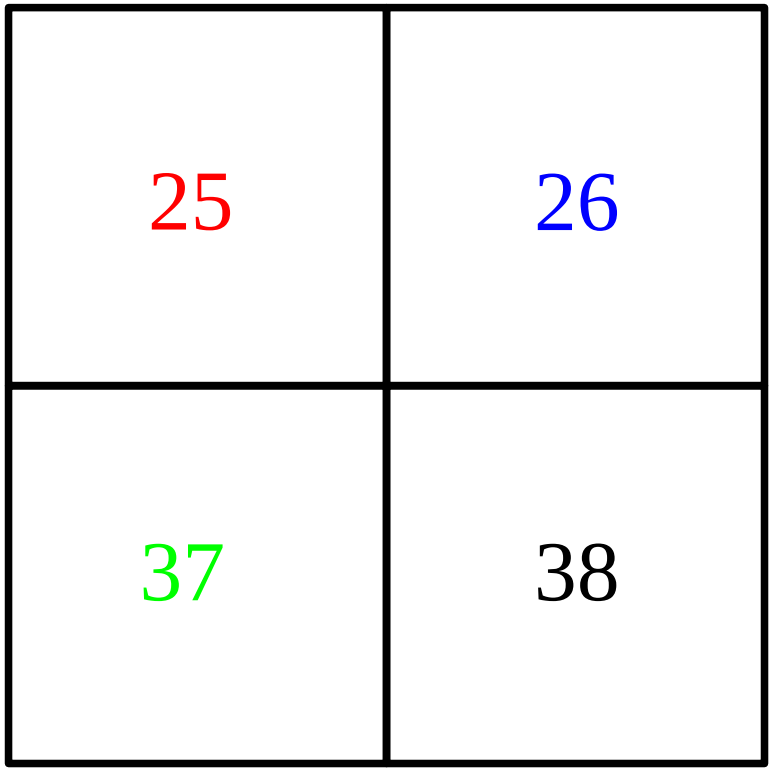
Reunion technique Micromegas

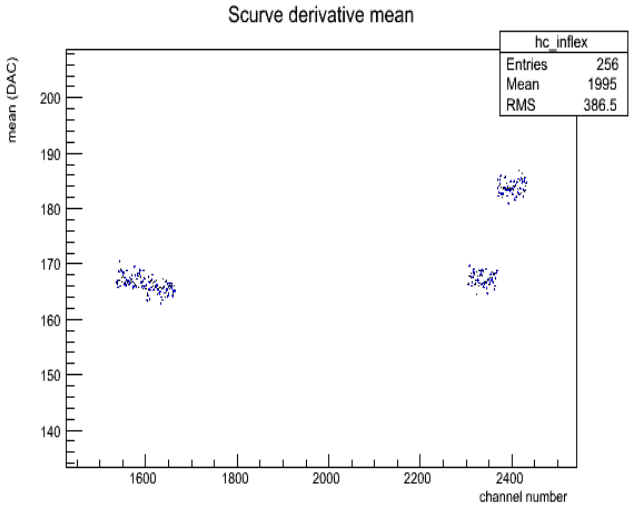
Calibration des PCBs standards

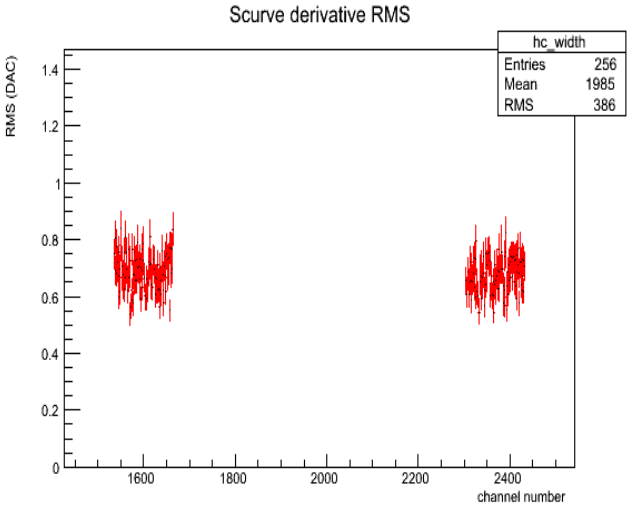
Calendrier pose des bulks

Calibration des PCBs standards

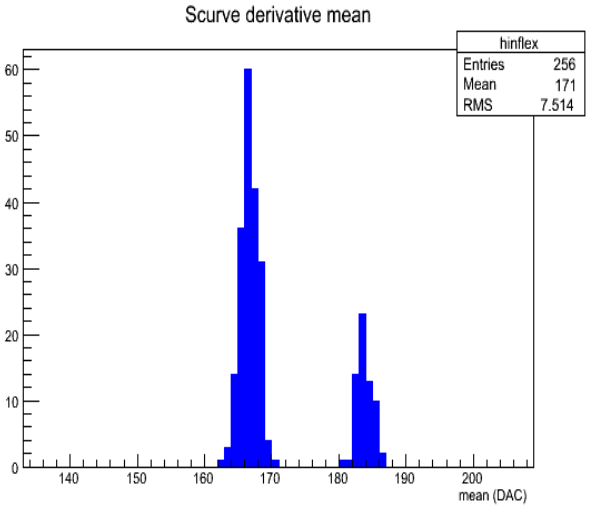


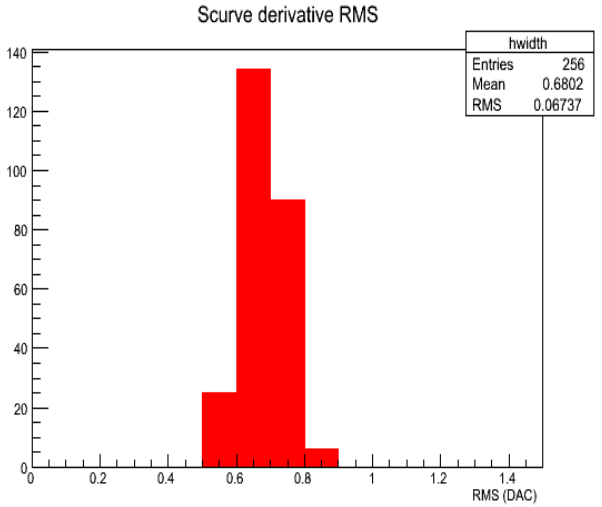
Calibration des PCBs standards ASU40 (DIF # 199 + firmware # 258)

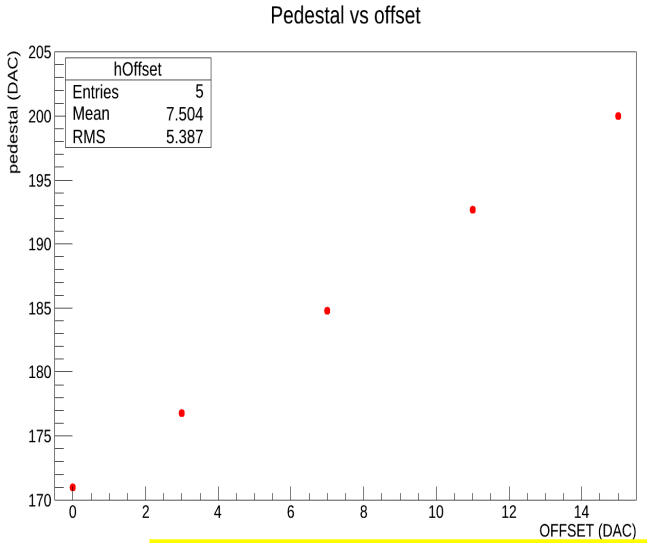




offset	Pedestal (DAC)	Sigma (DAC)
0	171	0,68
3	176,8	0,66
7	184,8	0,665
11	192,7	0,66
15	200	0,67



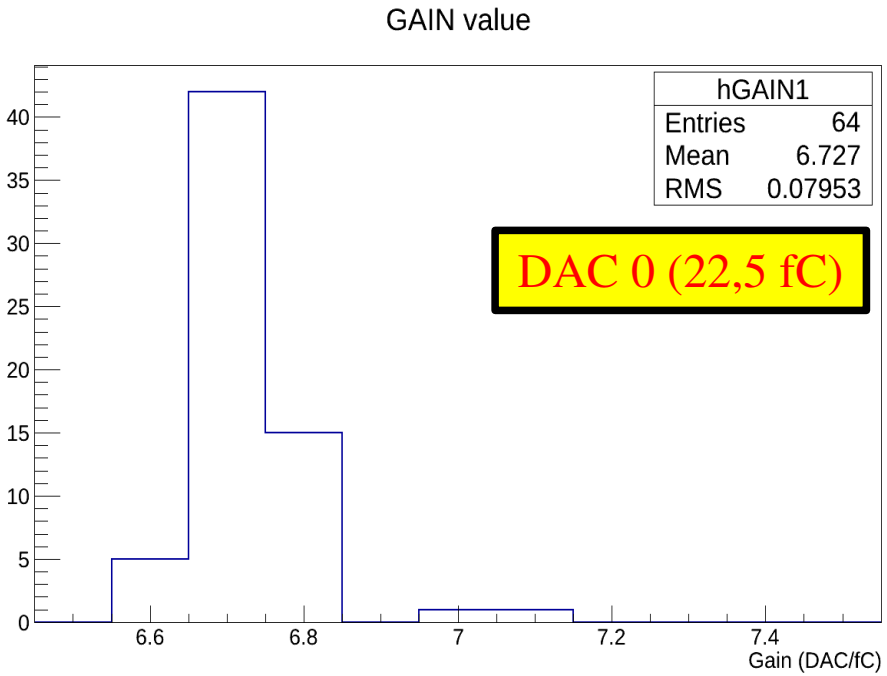


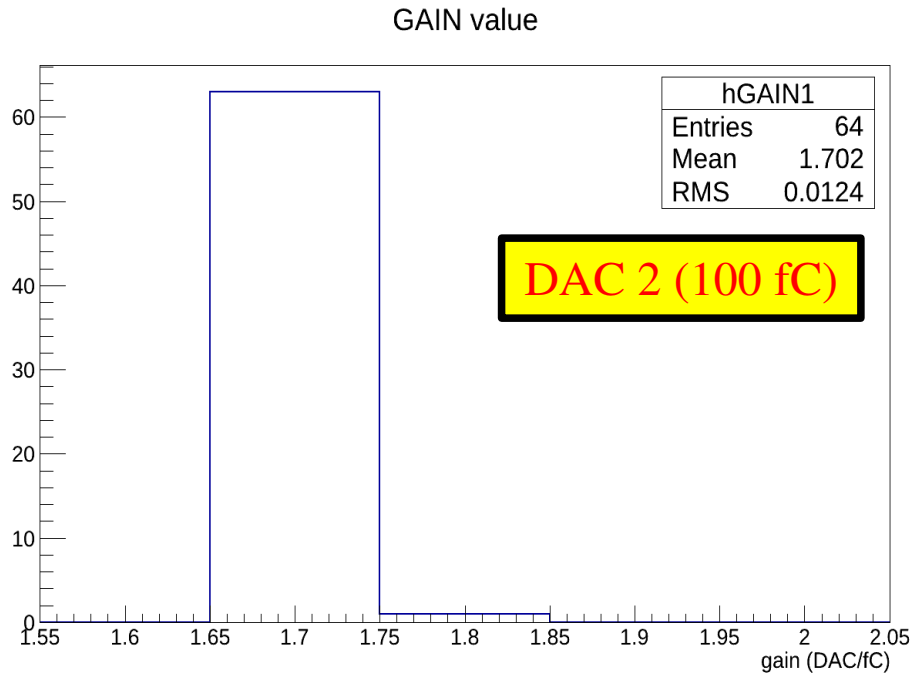


σ ~ 0,66

1 offset ~ 2 DAC (DAC 0)

Calibration des PCBs standards ASU40 (DIF # 199 + firmware # 258)





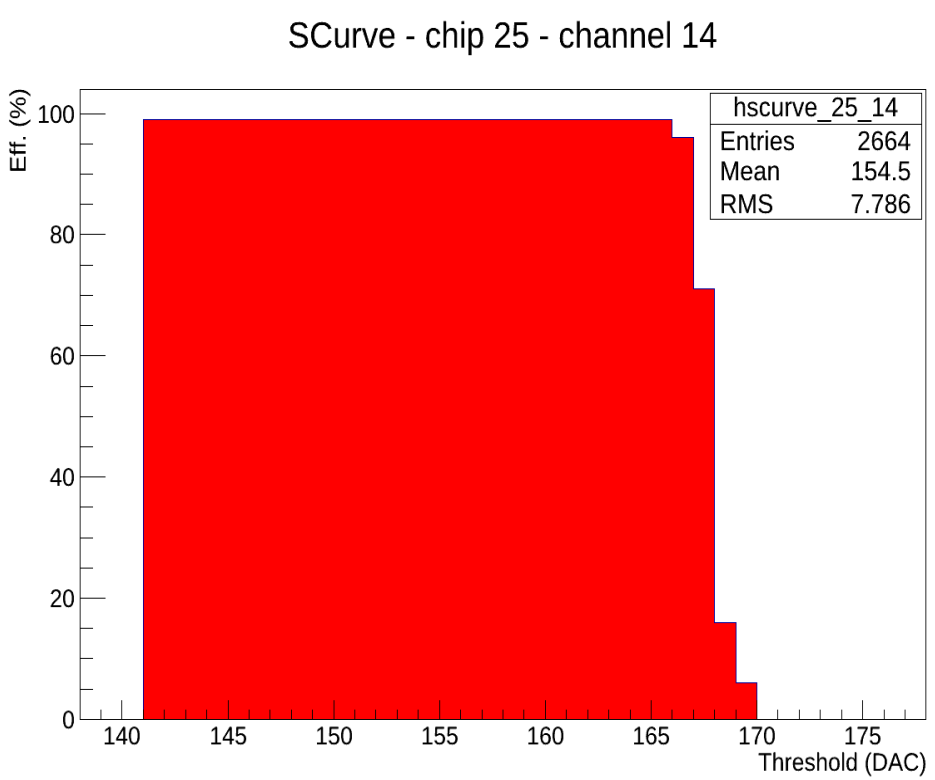
1 offset ~ 2 DAC (DAC 0)
6,7 DAC/fC
1 offset ~ 0,285 fC

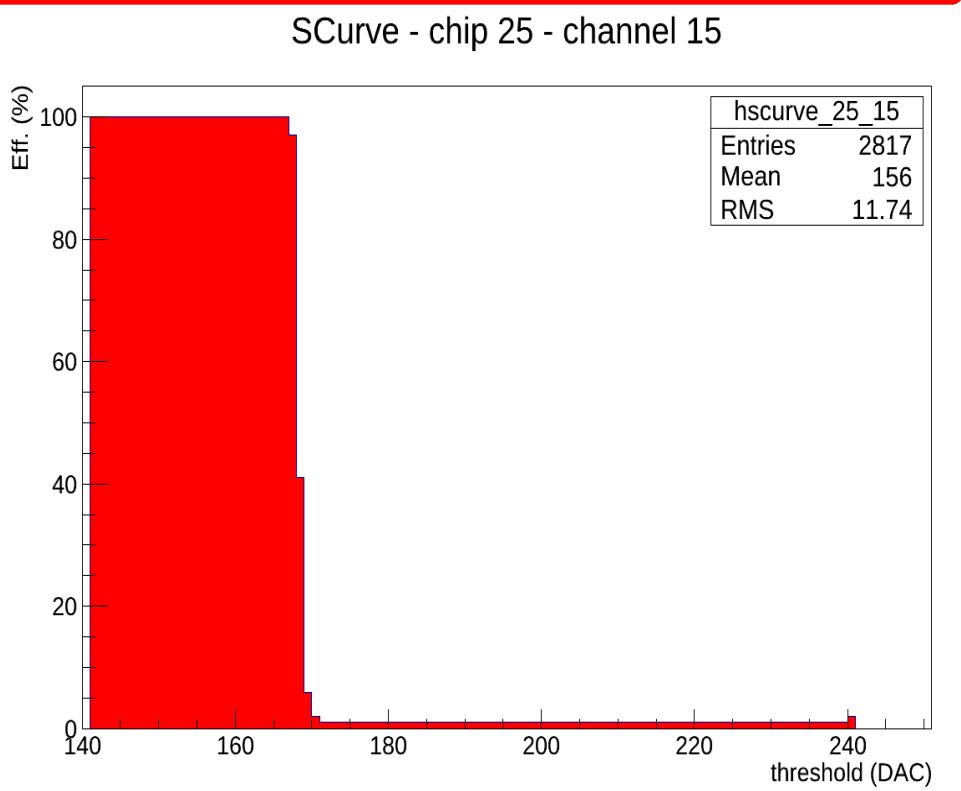
Chip #	Gain DAC 0 (DAC/fC)	Gain DAC 2 (DAC/fC)
1	6,727±0,08	1,702±0,01
2	6,727±0,07	1,702±0,01
3	6,61±0,065	1,702±0,01
4	6,392±0,07	1,638±0,05

1 offset ~ 1 DAC (DAC 2)
1,7 DAC/fC
1 offset ~ 0,6 fC

Jerome.samarati@lapp.in2p3.fr

Calibration des PCBs standards ASU40 (DIF # 199 + firmware # 258)





motif de 4 voies (12, 13, 14 & 15) tjs allumées
⇒ Scurve voie 15 ne redescend jamais á 0 , sur tous les ASUs

Calibration des PCBs standards ASU41 (DIF # 199 + firmware # 258)

Chip #	Gain DAC 0 (DAC/fC)	Gain DAC 2 (DAC/fC)
1	6,722±0,08	1,723±0,02
2	6,675±0,08	1,716±0,015
3	6,565±0,08	1,676±0,017
4	6,594±0,07	1,682±0,016

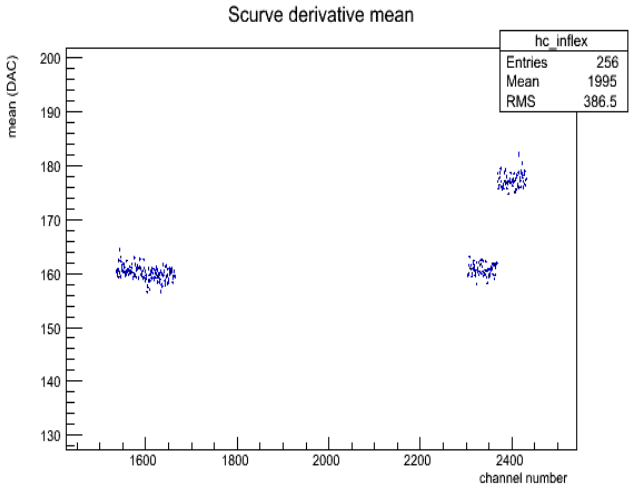
offset	Pedestal (DAC)	Sigma (DAC)
0	174	0,68
3	179,7	0,66
7	187	0,66
11	194,4	0,64
15	201,8	0,65

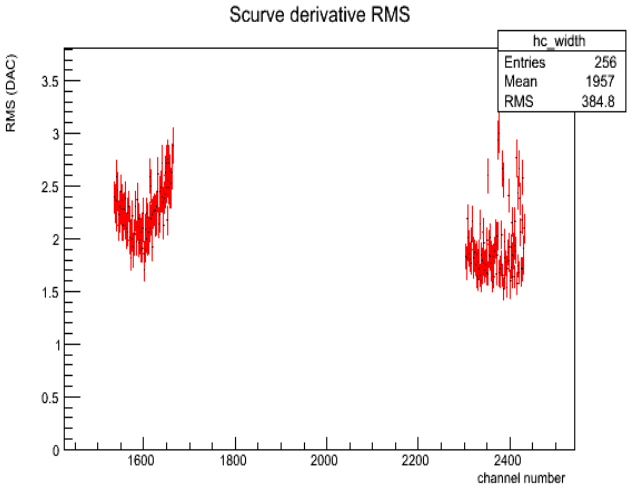
Calibration des PCBs standards ASU42 (DIF # 199 + firmware # 258)

Chip #	Gain DAC 0 (DAC/fC)	Gain DAC 2 (DAC/fC)
1	6,752±0,09	1,683±0,015
2	6,754±0,086	1,682±0,013
3	6,731±0,07	1,678±0,014
4	6,715±0,06	1,683±0,012

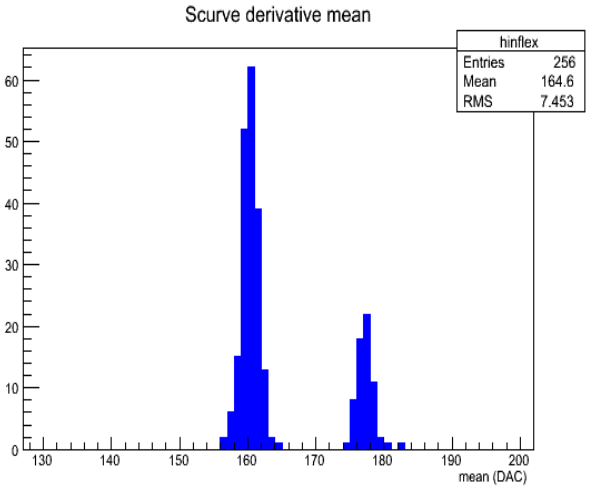
offset	DAC 0		DAC 2	
	Pedestal (DAC)	Sigma (DAC)	Pedestal (DAC)	Sigma (DAC)
0	169,7	0,73	164,1	0,246
3	175	0,72	167,1	0,286
7	182,2	0,69	171,1	0,294
11	189,4	0,68	175,2	0,256
15	196,5	0,68	179,2	0,251

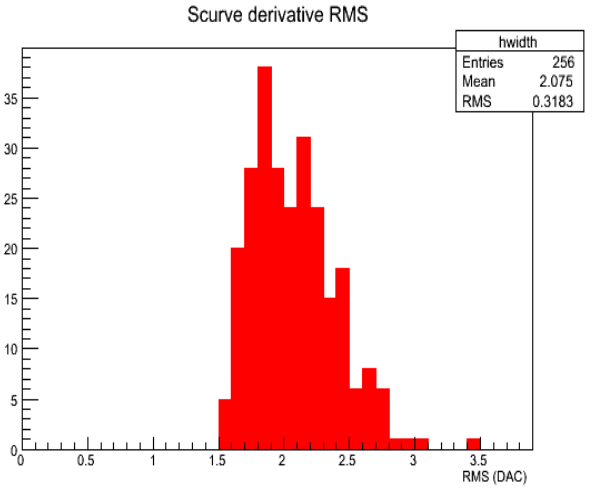
Calibration des PCBs standards ASU40 (DIF # 217 + firmware # 268)

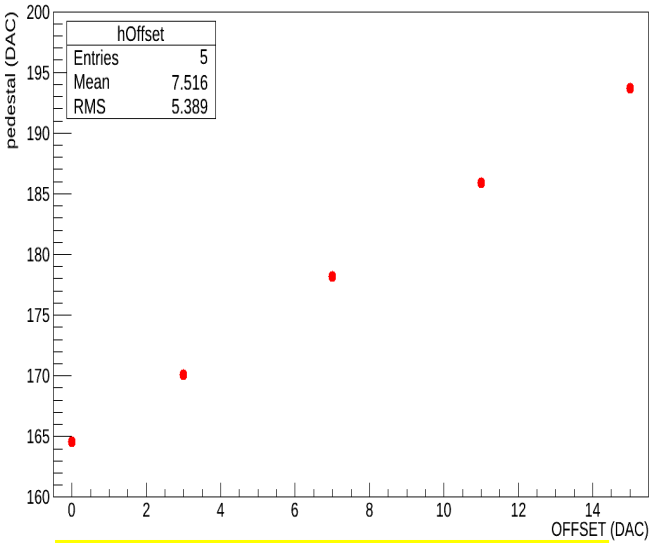




offset	Pedestal (DAC)	Sigma (DAC)
0	164,6	2,075
3	170,1	2,057
7	178	2,138
11	185,9	2,089
15	193,7	2,03



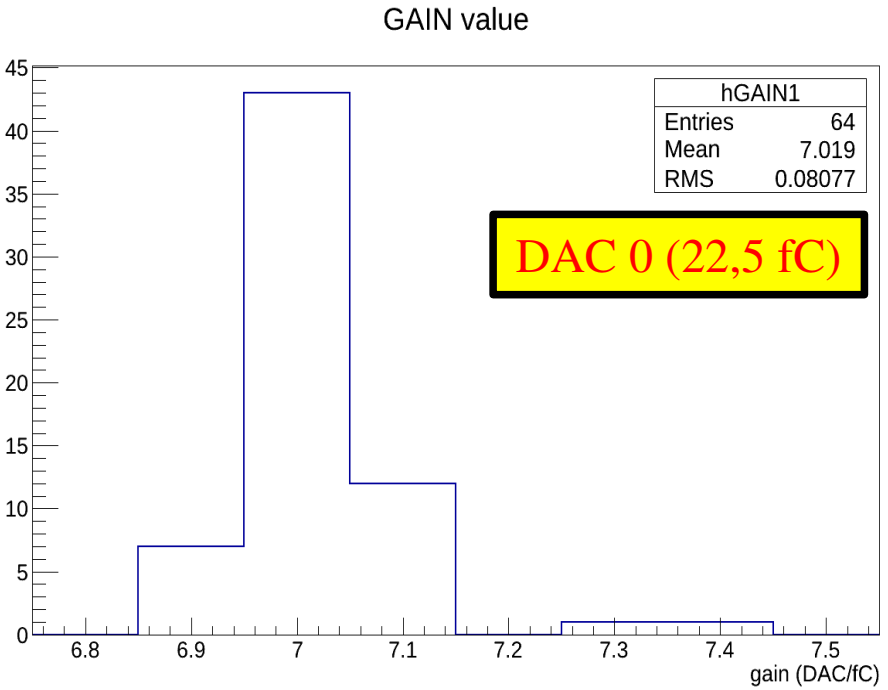




σ ~ 2

1 offset ~ 2 DAC (DAC 0)

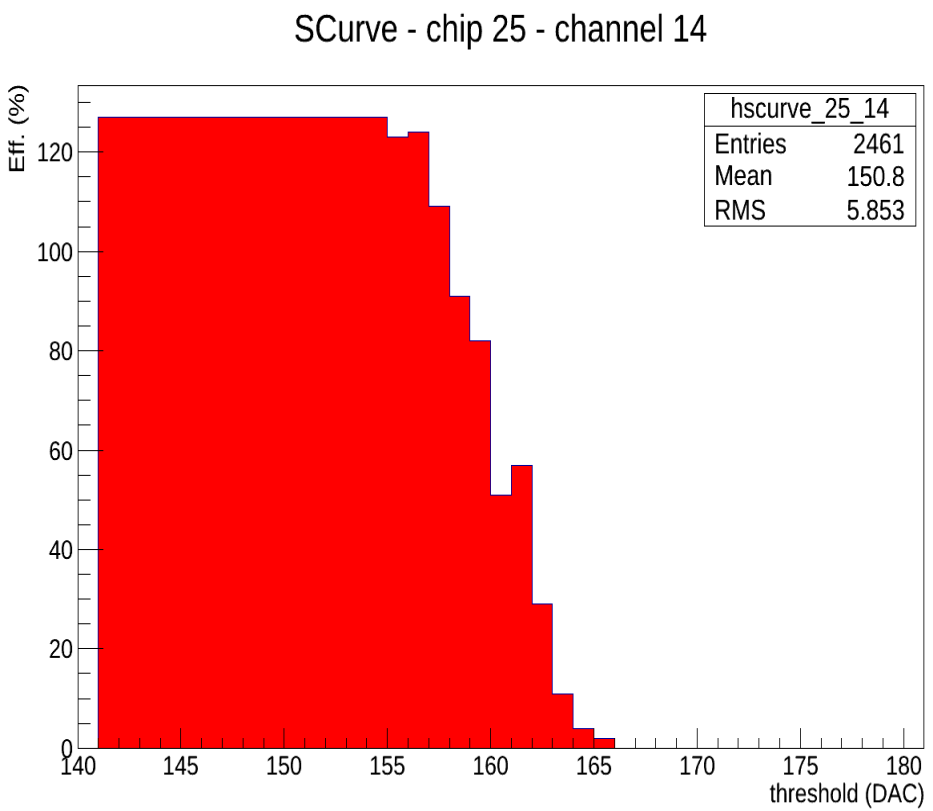
Calibration des PCBs standards ASU40 (DIF # 217 + firmware # 268)

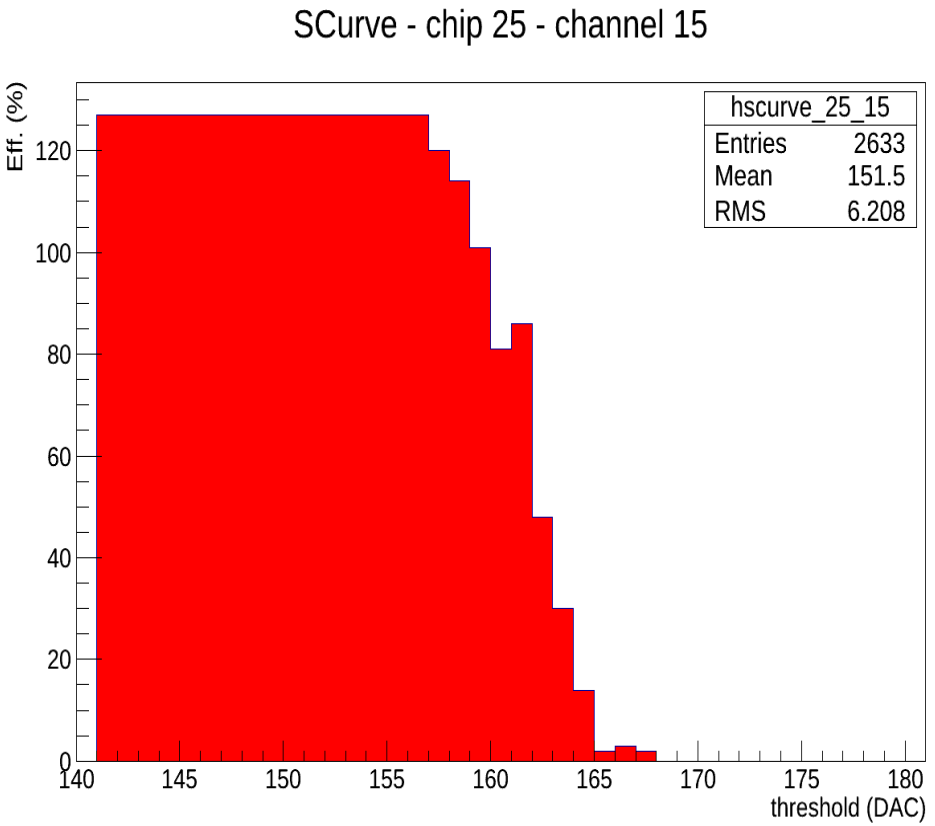


Chip #	Gain DAC 0 (DAC/fC)	Gain DAC 2 (DAC/fC)
1	7,024±0,07	?
2	7,029±0,06	?
3	6,912±0,07	?
4	6,696±0,075	?

La Scurve pour le DAC 2 ne bascule jamais ???

Calibration des PCBs standards ASU40 (DIF # 217 + firmware # 268)





Scurve voie 15 se comporte normalement sur tous les ASUs

Calibration des PCBs standards ASU41 (DIF # 217 + firmware # 268)

Chip #	Gain DAC 0 (DAC/fC)	Gain DAC 2 (DAC/fC)
1	6,995±0,08	?
2	6,983±0,09	?
3	6,858±0,07	?
4	6,885±0,06	?

offset	Pedestal (DAC)	Sigma (DAC)
0	167,4	2,039
3	173	2,07
7	180,6	2,05
11	188,1	1,981
15	195,3	2

Calibration des PCBs standards ASU42 (DIF # 217 + firmware # 268)

Chip #	Gain DAC 0 (DAC/fC)	Gain DAC 2 (DAC/fC)
1	7,139±0,07	?
2	7,05±0,087	?
3	7,079±0,06	?
4	7,05±0,07	?

offset	DAC 0		DAC 2	
	Pedestal (DAC)	Sigma (DAC)	Pedestal (DAC)	Sigma (DAC)
0	163,2	2,329	162,2	0,584
3	168,5	2,214	165,1	0,5875
7	175,7	2,206	169,2	0,6
11	182,9	2,142	173,3	0,59
15	190,1	2,152	177,3	0,58

Conclusion : pas de voies mortes sur les 3 ASUs et valeurs cohérentes avec les ASUs 32×48
Gain DAC 0 ~ 6,7 / 7 et 1,7 pour DAC 2
Trouver les config de DIF et/ou firmware pour résoudre pbs

Calendrier pose des bulks

08/05 : Dépose des 3 Asus câblés chez Rui après calibration pour dépose des bulks
Fin de semaine 21 (20 – 24/05) : Retour des 2 Asus résistifs
Semaine 22 (27 – 31/05) : Câblage chez ADDAX des 2 Asus résistifs et calibration
Semaine 23 (03 – 07/06) : Retour chez Rui pour dépose des bulks
des 2 Asus résistifs