



Xcalibration in Strasbourg



- 5 modules (8, 2, 26, 641, 3) for X-calibration with Antwerpen and Louvain and Strasbourg
- Setup (available):
 - Last version for Lyon DAQ, Lt_1_22 and Labview 6.1
 - HV power supplies (Caen A835P SY527)
 - 1 CCU for 6 modules
 - 1 MUX (not used)
 - 1 TPO (not used)
 - 1 TPO-paacb board (BPpulse: not used)
 - 4 VUTRI + 4 paacb



Status of Xcalibration



Specificities of Strasbourg

- Work with 4 modules only (002, 003, 008, 641)
- Do not use MUX nor PAACB (unavailable at that time)
- Louvain cooling plant not used (under repair)
- Cooling only with “fridge” (active cooling)
- Manual scenario
 - Cooling plant unavailable
 - SY527 not yet implemented in Labview Slow Control
 - Communication between Lt and Labview not tested
- All hardware available, still need some automatization.





Longterm Scenario



ChangeHV 400 Antwerp (~10 hours)

ChangeCool 20
 PedRun (every 80 sec)
 TempReached
 PedRun
 CalProfRun
 CalRun (4 APV modes)
 LatRun
 IVRun

SaveRec 0 MODULLTFIRST

ChangeCool -20
 PedRun (every 80 sec)
 TempReached
 PedRun
 CalProfRun
 CalRun (4 APV modes)
 LatRun
 IVRun

SaveRec 2 MODULLTCOLD

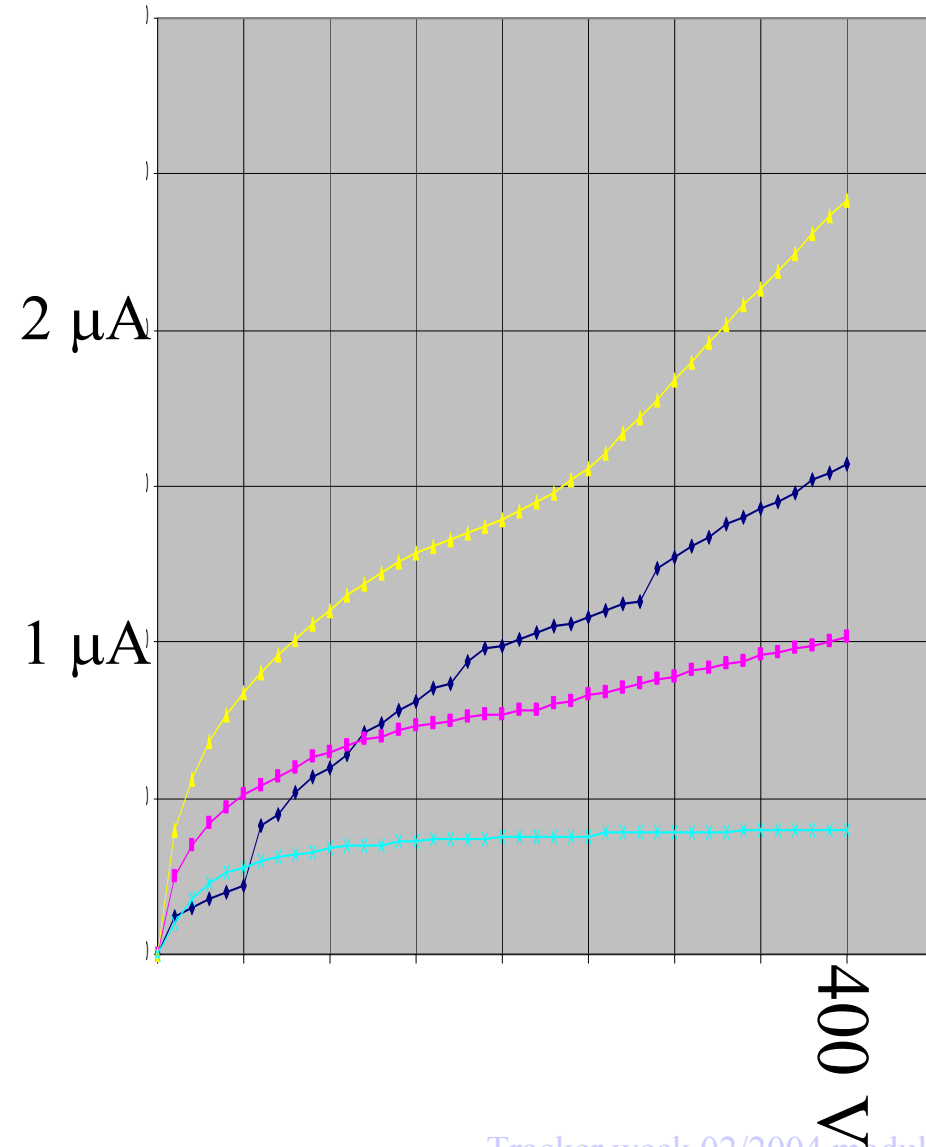
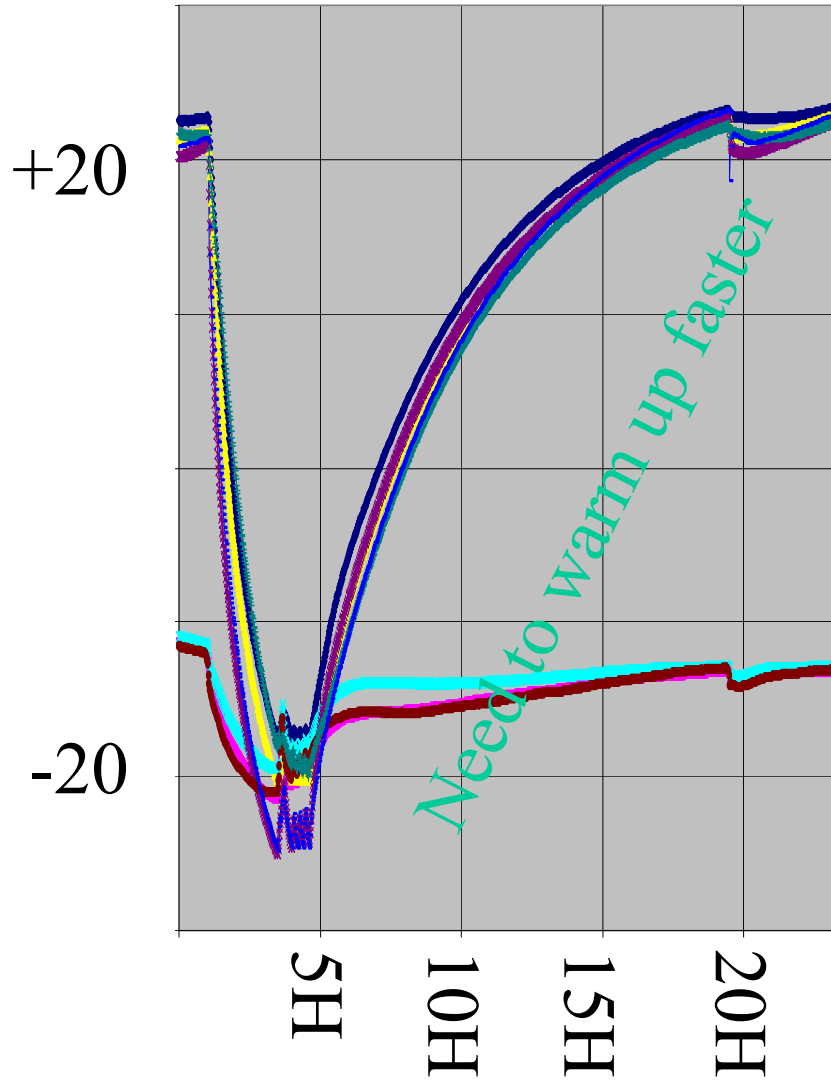
ChangeCool 20
 PedRun (every 80 sec)
 TempReached
 PedRun
 CalProfRun (4 APV modes)
 IVRun

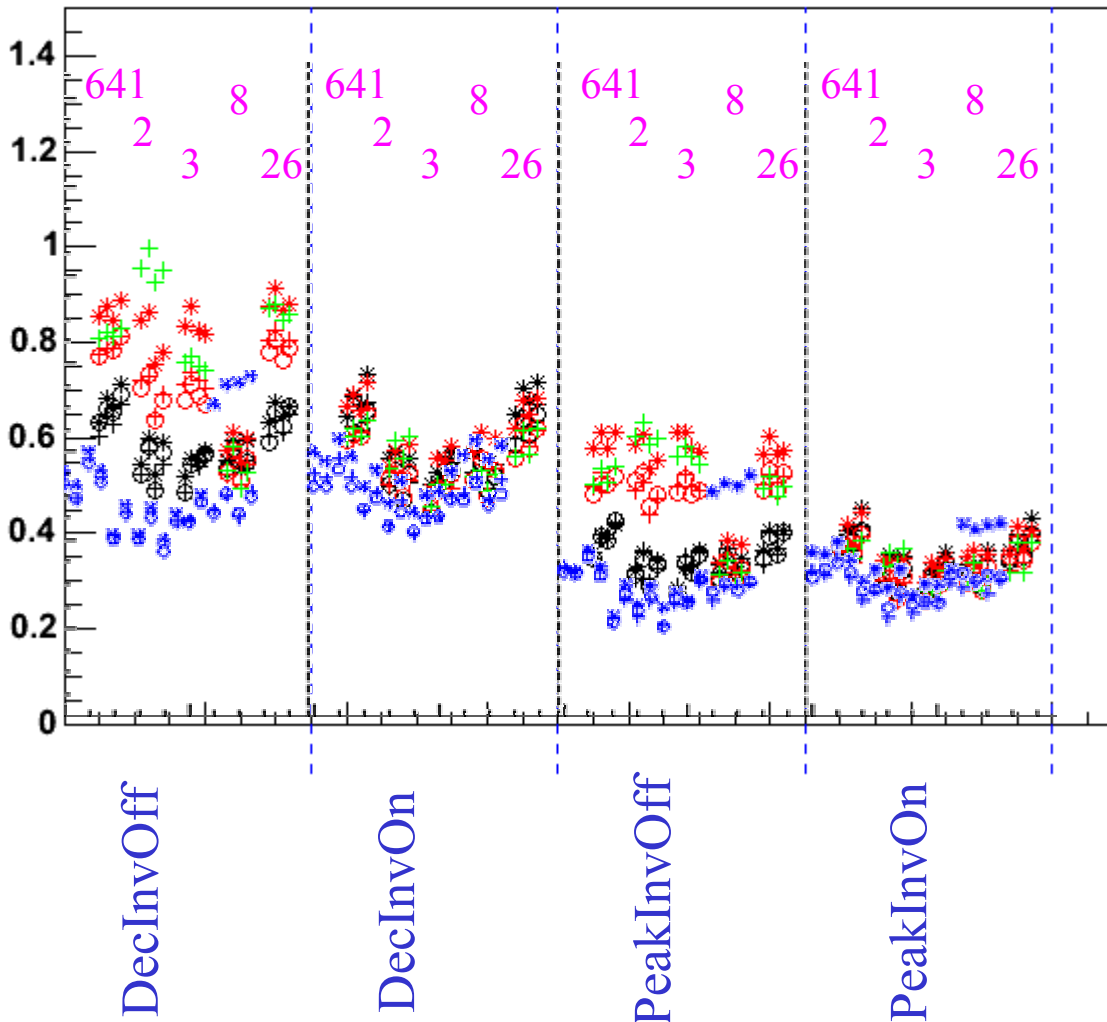
SaveRec 3 MODULLTLAST

Three scenarios:

One for each temp,

Temp controled “manually”





⊗ Louvain

● Antwerpen

⊗ Louvain:

- one day after
- new position
in the cold box

● Strasbourg

+ 20°

* -20°

o 20°



Bad Channels (2): Antwerp - Louvain - Strasbourg



Comparison for Module 2

BadChDeclInvOFF	BadChDeclInvON	BadChPeakInvOFF	BadChPeakInvON
Record 0 (20°C)			
1	no	1 256	no
1 33 128 193 256 270 433	1 33 193 256 270	1 33 128 129 193 256 257 270	1 33 193 256 257 270 433
1 33 193 255 256 257 461 465 466	1 33 193 255 256 257 461 464 465 466	1 33 129 193 255 256 257 461 464 465 466	1 33 128 129 193 255 256 257 461 464 465 466
33 128 193 256 353 400	33 128 193 256 353 433	33 128 193 256 353 433	33 128 193 256 353 433
Record 2 (-20°C)			
1 257	1	1	1
1 33 128 193 256 270	1 33 193 256 270	1 33 128 256 257 270 512	1 128 193 256 257 270
1 33 193 255 256 257 353 433 461 465 466 507 508 509 510	1 33 193 255 256 257 353 433 461 465 466 507 509 510	1 33 193 255 256 257 353 433 461 465 466 507 508 509 510	1 33 193 255 256 257 353 433 461 465 466 507 508 509 510 512
Record 3 (20°C)			
1	no	1 256	no
1 33 128 193 256 270	33 193 256 270	1 33 128 129 193 256 270	1 33 193 256 257 270
1 33 193 255 256 257 461 464 465 466	1 33 193 255 256 257 461 464 465 466	1 33 193 255 256 257 433 461 464 465 466 512	1 33 128 129 193 255 256 257 433 461 464 465 466

Louvain

Antwerpen

Aachen (ARC) with Tony's macro

Strasbourg



Bad Channels (8): Antwerp - Louvain - Strasbourg



Comparison for Module 8

BadChDeclnvOff	BadChDeclnvON
Record 0 (20°C)	
32 193 255 353 461 464 465 466	32 193 255 461 465
32 193 255 461 464 465 466	32 193 255 461 465
1 32 193 255 257 461 465 466	1 32 193 255 257 461 464 465 466
32 127 193 255 353 433	32 127 193 255 353 433
Record 2 (-20°C)	
32 51 52 127 193 255 257 461 464 465 466	32 193 255 461 465
32 51 52 127 193 255 353 433 461 465 507 508 509 510	32 51 52 127 193 255 353 433 461 465 507 509 510
32 52 193 255 353 461 464 465 466	32 51 52 193 255 461 464 465 466
Record 3 (20°C)	
32 193 255 353 461 464 465 466	32 193 255 461 465
1 32 52 193 255 257 461 464 465 466	1 32 52 193 255 257 461 464 465 466
32 193 255 461 464 465 466	32 193 255 461 464 465 466

Louvain
Antwerpen
Aachen (ARC) with Tony's macro
Strasbourg



Bad Channels (8): Antwerp - Louvain - Strasbourg



Comparison for Module 8

BadChPeakInvOFF	BadChPeakInvON
32 51 193 255 256 461 464 465 466	32 193 255 461 464 465 466
32 193 255 257 353 461 464 465 466	32 129 193 255 257 461 464 465 466
1 32 193 255 257 461 464 465 466	1 32 193 255 257 461 464 465 466
32 127 193 255 353 376 433	32 127 193 255 353 376 433
32 127 193 255 353 461 464 465 466	32 193 255 461 464 465 466
32 51 52 127 193 255 353 433 461 465 507 508 509 510	1 32 51 52 127 193 255 353 433 461 465 507 508 509 510
32 129 193 255 257 461 464 465 466	32 51 127 193 255 257 461 464 465 466
32 127 193 255 256 461 464 465 466	32 51 52 127 193 255 461 464 465 466
1 32 51 193 255 257 461 464 465 466	1 32 193 255 257 461 464 465 466
32 193 255 257 461 464 465 466	32 129 193 255 257 353 461 464 465 466

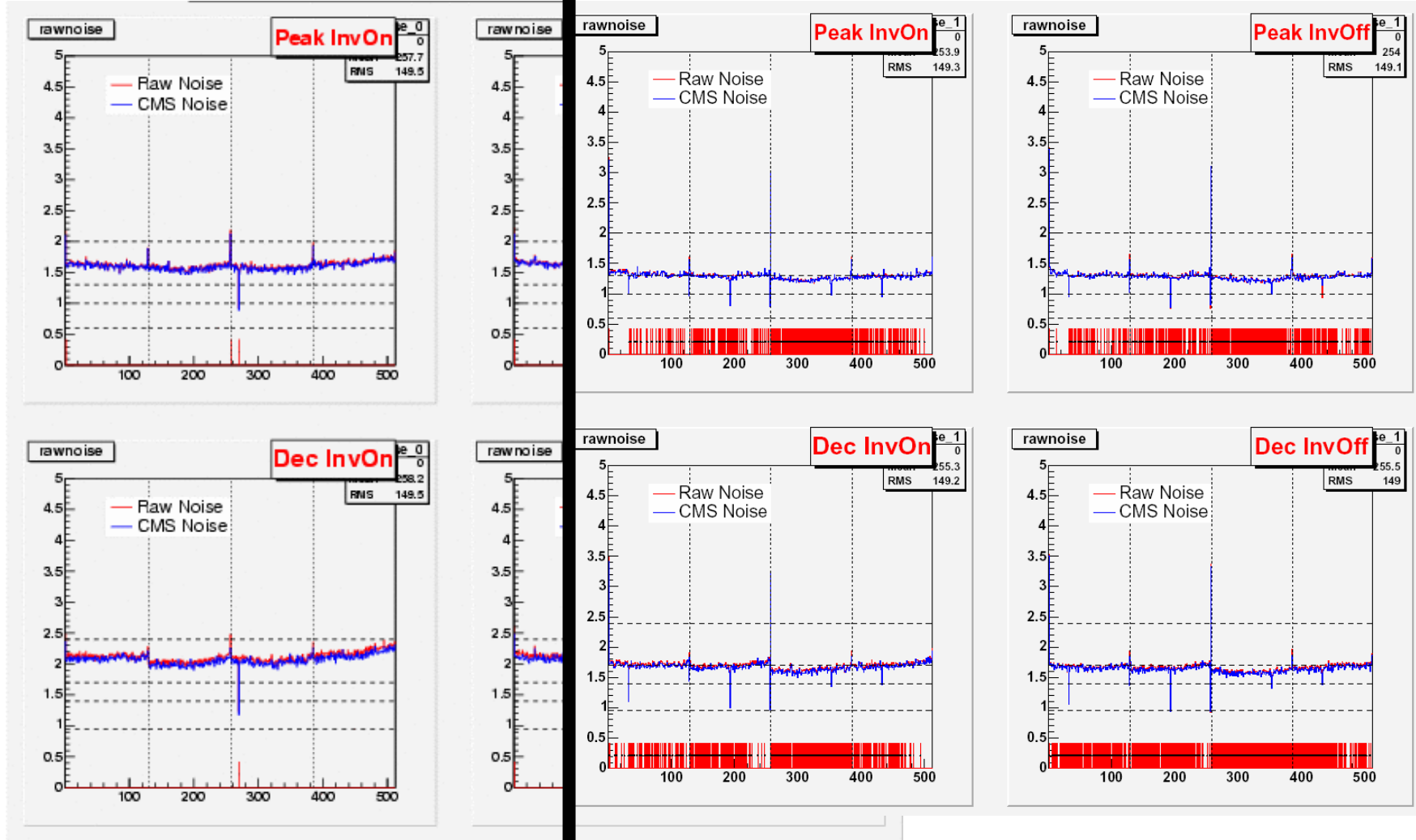
Louvain
Antwerpen
Aachen (ARC) with Tony's macro
Strasbourg



Tony's macro for LT: Antwerp



Tanks Tony and Patrick Gartung



Louvain

Strasbourg

- All hardware available in Strasbourg
 - Cooling plant under repair
- Software up to date
 - Need implementation of SY527 in Labview
 - Need to set back the system with the MUX, TPO and PAACB
- CMN very low compared to LLN and UIA
 - Raw noise also much lower... needs other cuts
- Cuts and grounding need to be adapted between centers to achieve better agreement
- Need modules ... maybe with inserted known defects