

Summary of ASIC defects in Japan

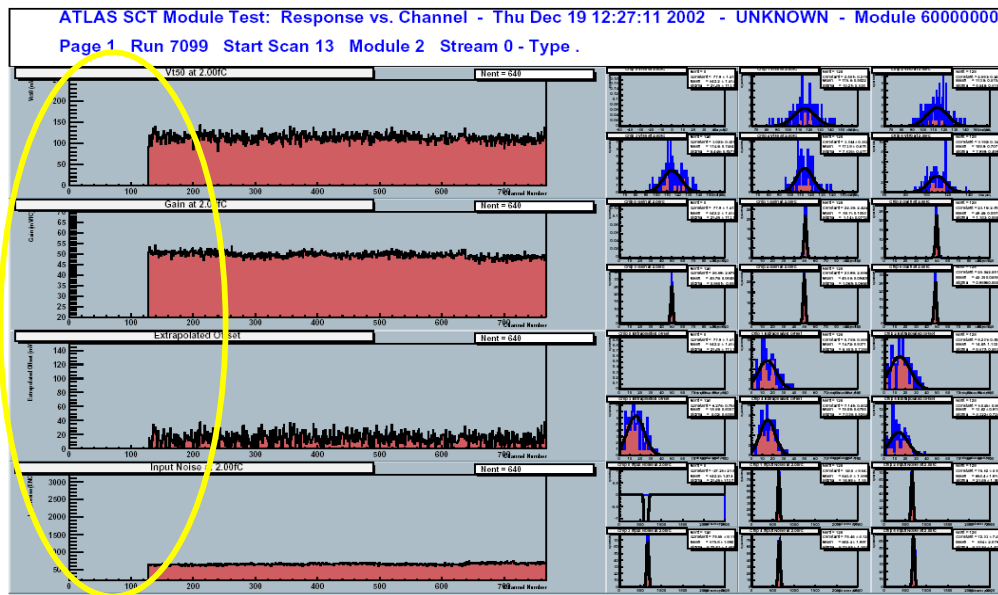
• Dead	15	• Sawtooth	3
• STUCKCELL	8	• Block of "partbonded"	14
• LGS(Cold,Ish=30uA)	41	• Others	5
• LGS(Cold,Ish=20uA)	7		
• TrimDAQloadingFailed	3	• Total(as of 1 Sep.)	90
• Negative offset	21		
• High offset	5		
• Low gain (<45mV/fC)	2		
• Abnormal cal line	7		

ID = 776 :Dead : M00 :Z40800-W04-192

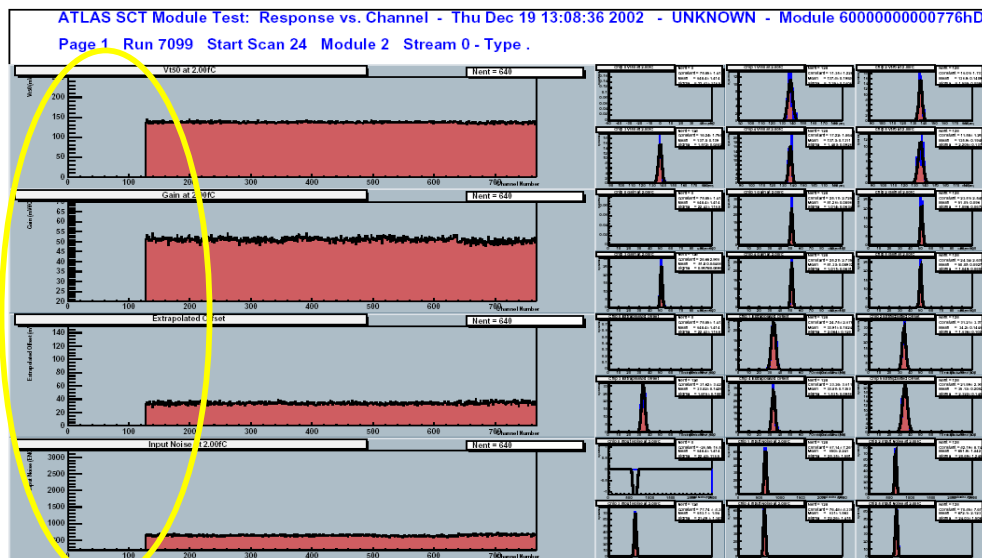
@ warm & cold

15 ASICs (17%)

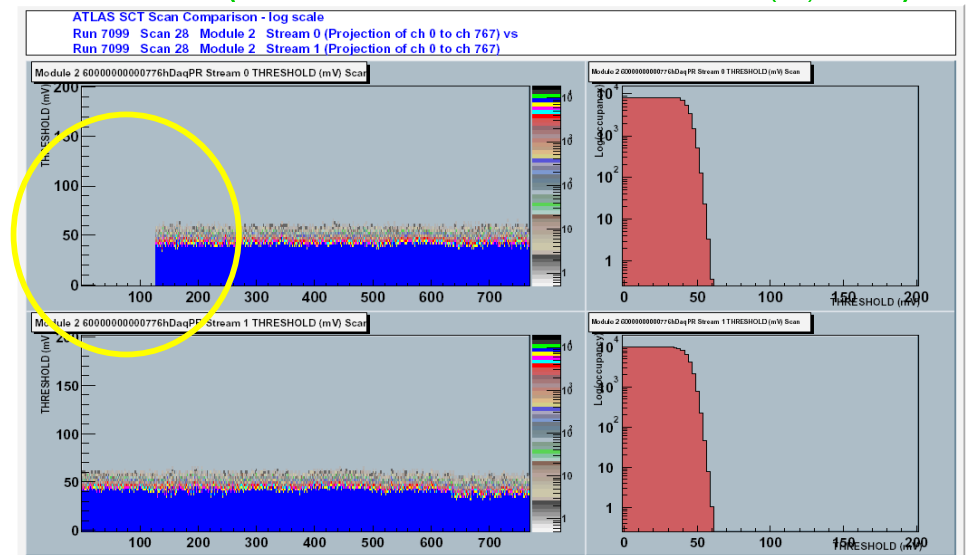
Before trim



After trim



After trim (Noise :Threshold Curve @0fC)

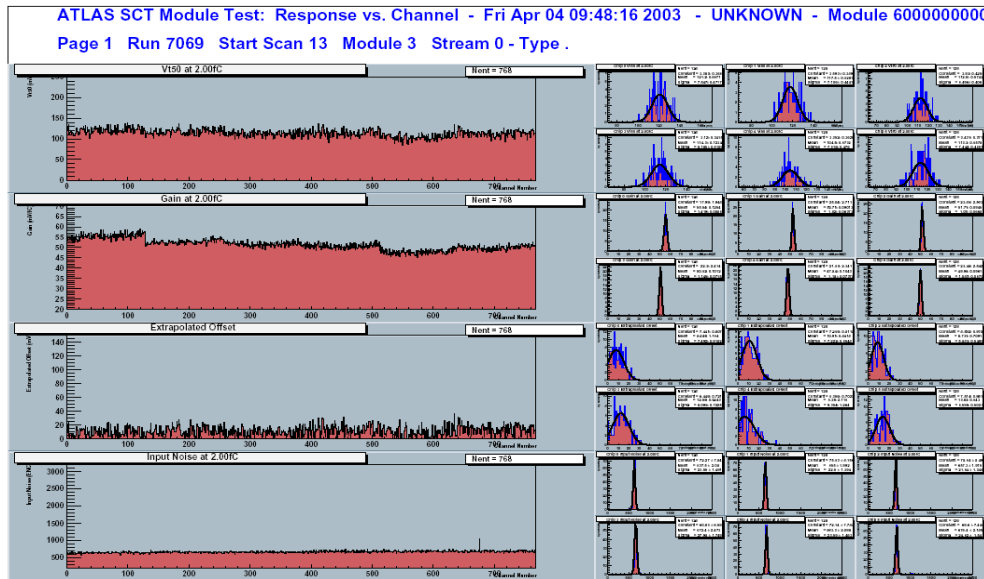


ID = 1358 :Stuck cell : E05 :Z41089-W02-219

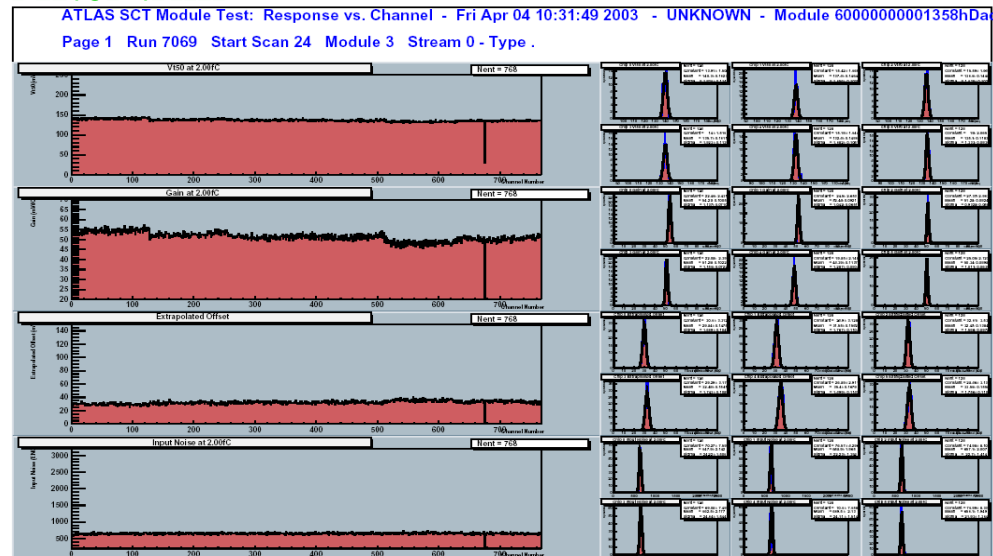
Before trim

@ warm & cold

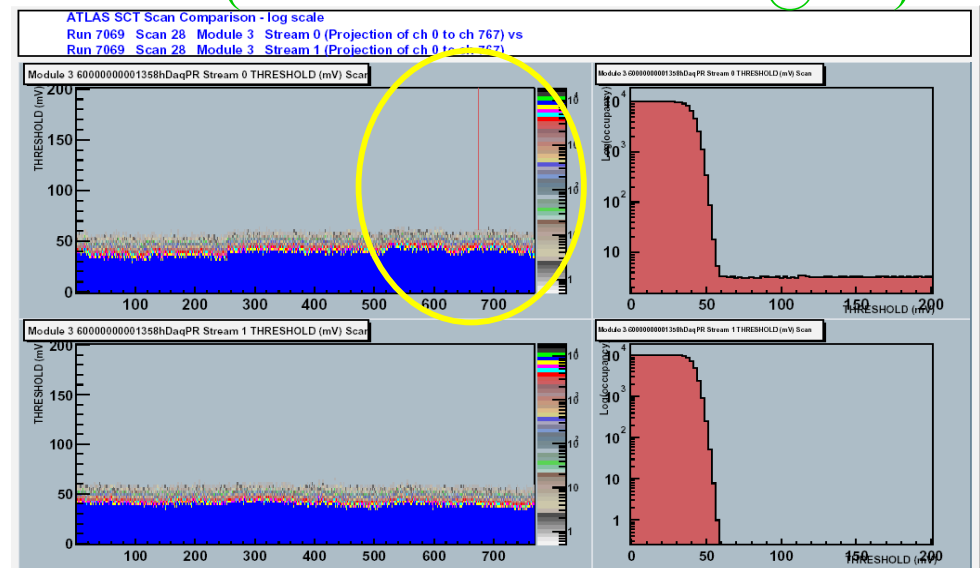
8 ASICs (9%)



After trim

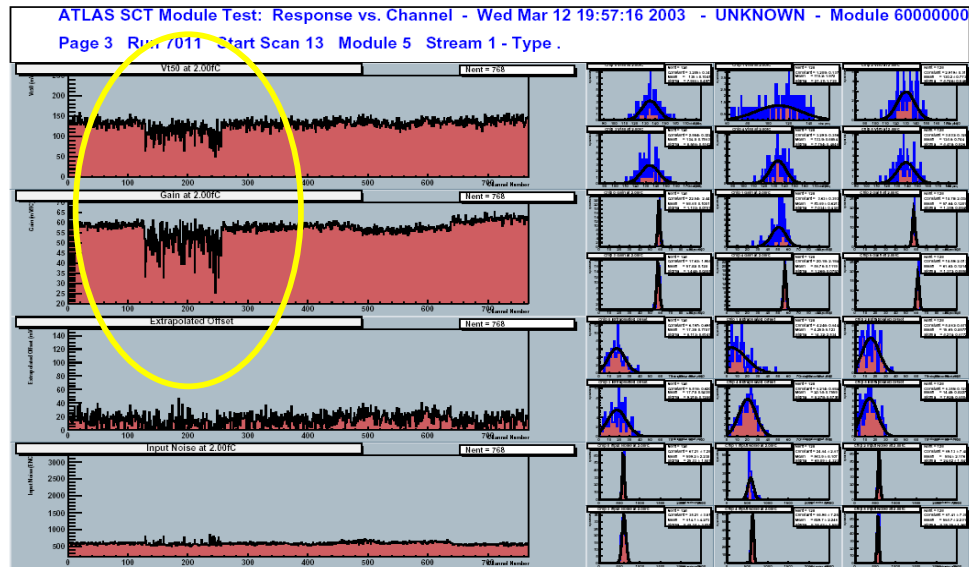


After trim (Noise :Threshold Curve @0fC)



ID = 1216 :Large gain spread : S09 :Z40862-W13-69

Before trim



@ cold (Ish=30_A)

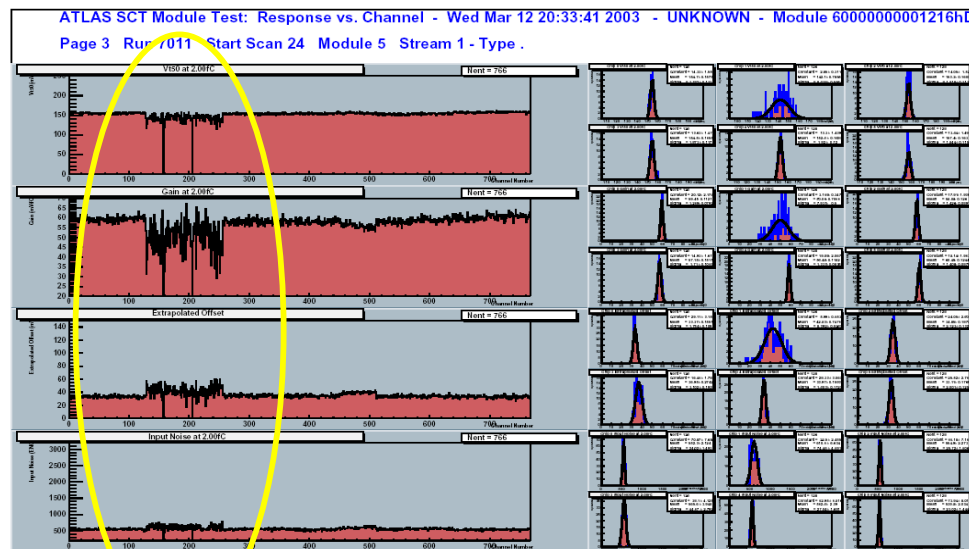
41 ASICs



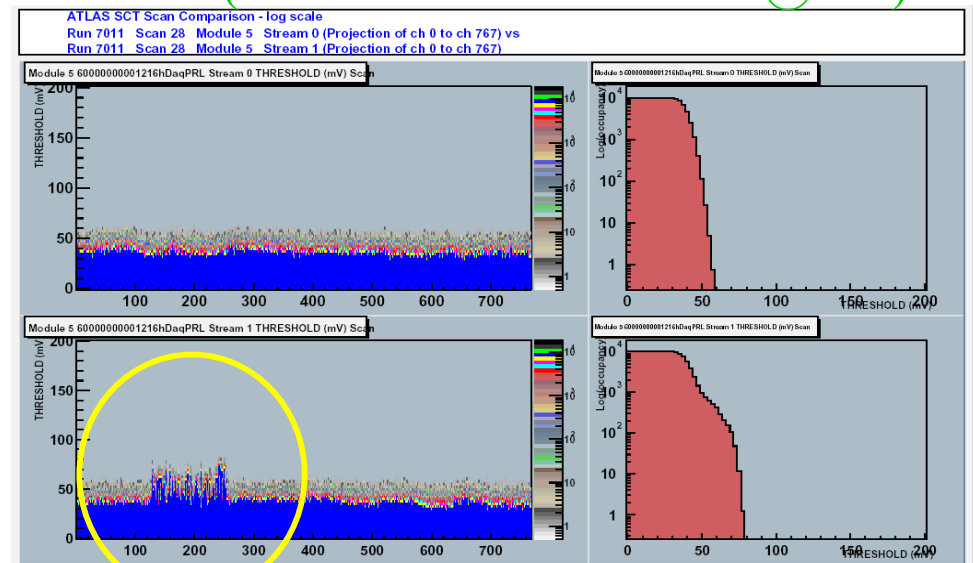
@ cold (Ish=20_A)

7 ASICs (8%)

After trim

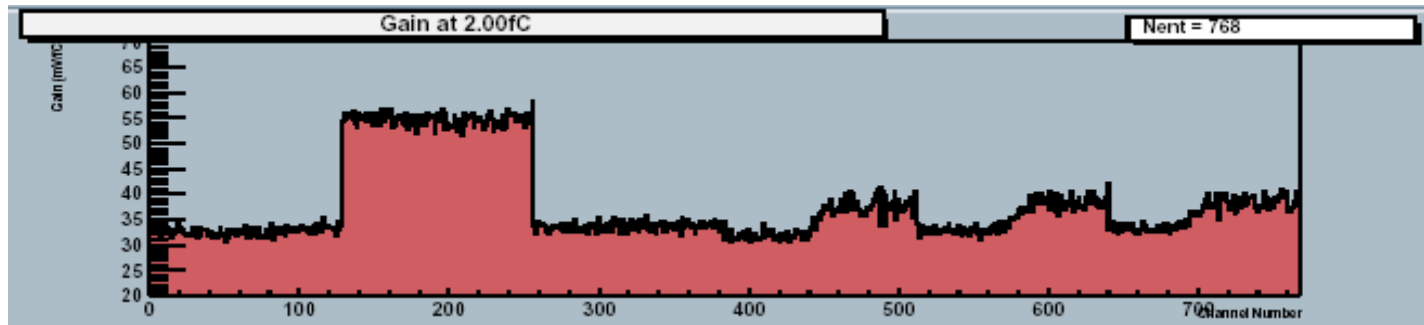


After trim (Noise :Threshold Curve @0fC)

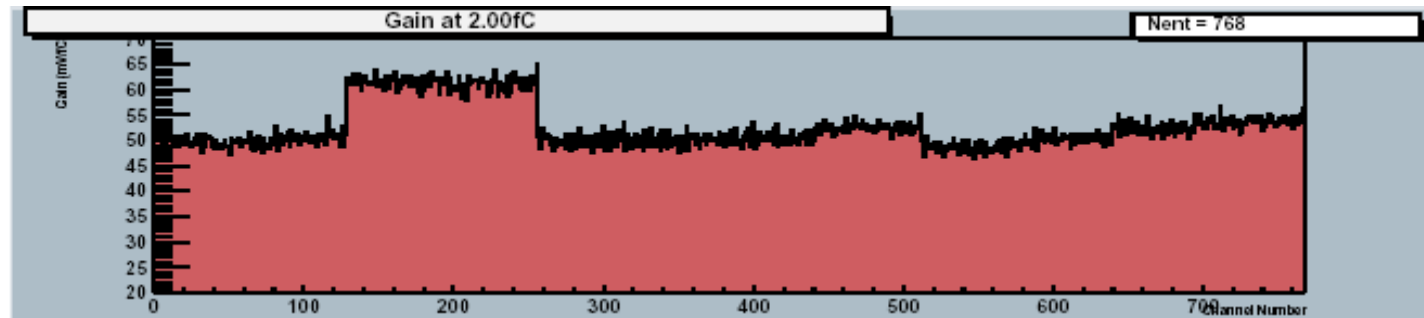


ID=1216 S09 LGS @cold

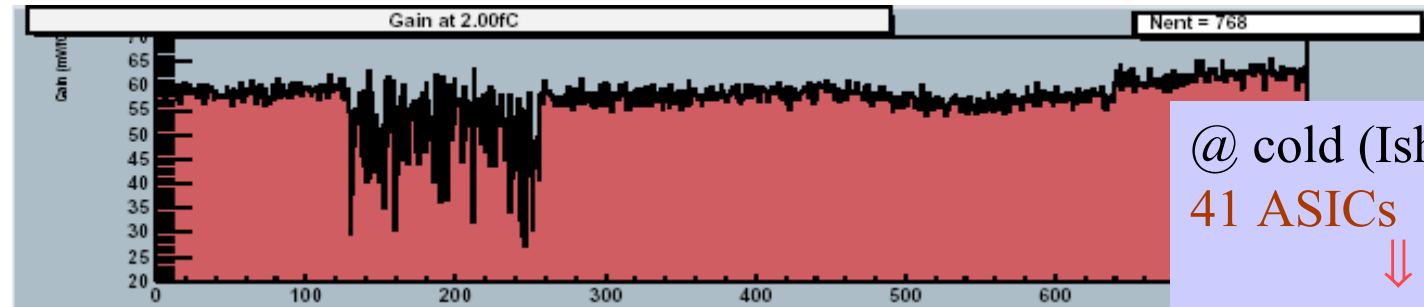
Ish=10_A



Ish=20_A



Ish=30_A



@ cold (Ish=30_A)

41 ASICs



@ cold (Ish=20_A)

7 ASICs (8%)

@ warm (Ish=30_A)

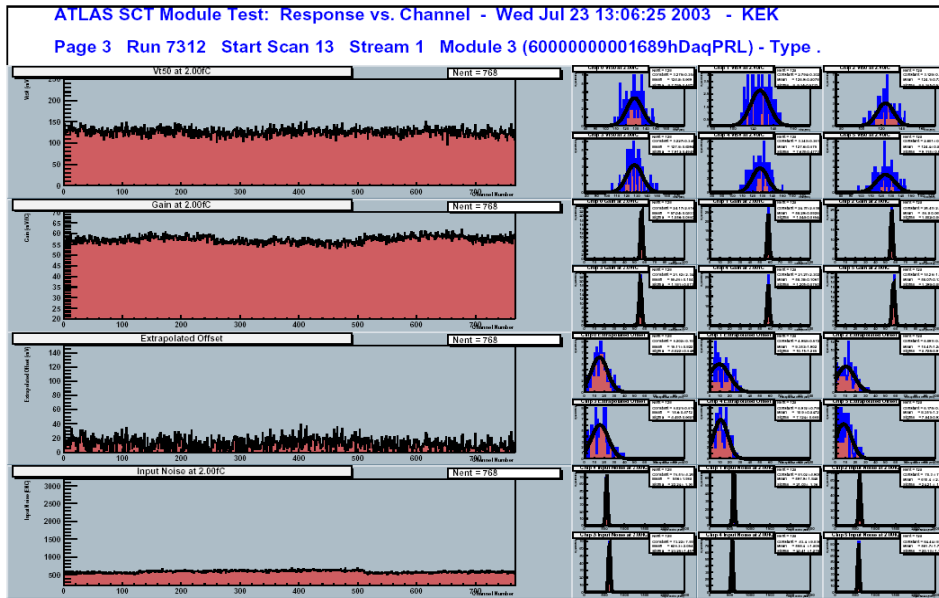
6 ASICs

ID = 1689 :TrimDAC loading failed : S11 :Z41084-W09-87

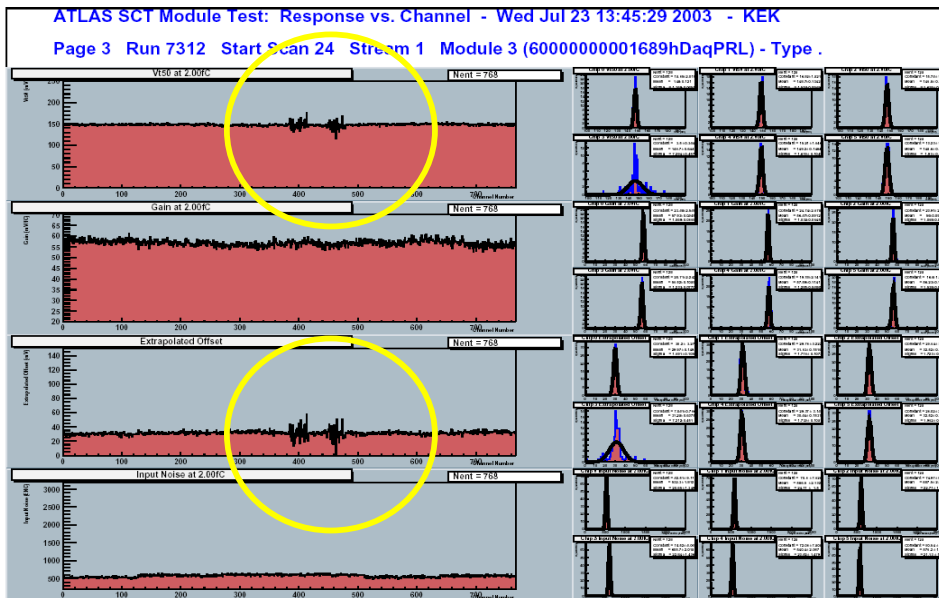
Before trim

@ warm & cold

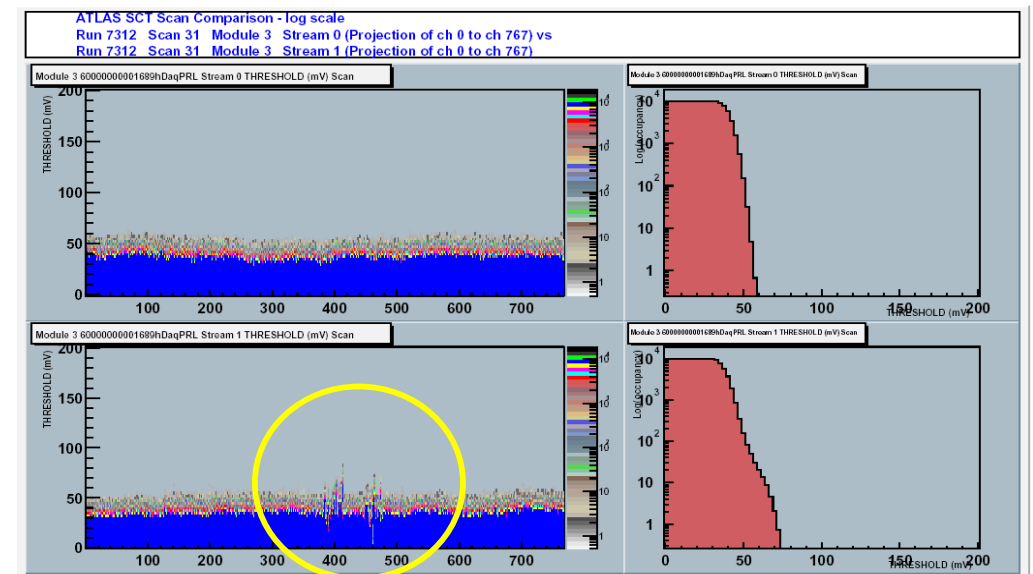
3 ASICs (3%)



After trim



After trim (Noise :Threshold Curve @0fC)

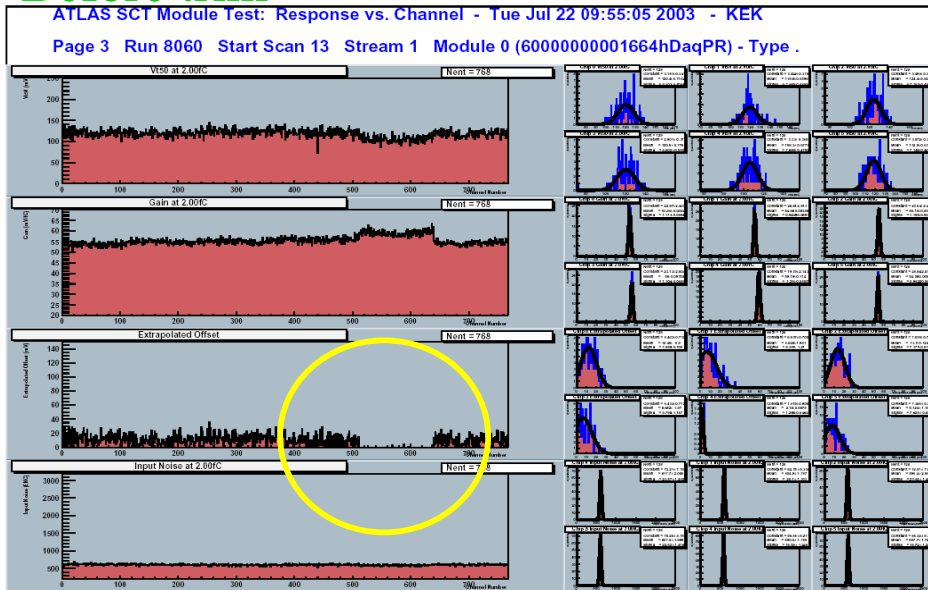


ID = 1664 :Negative Offset : S12 :Z41084-W07-40

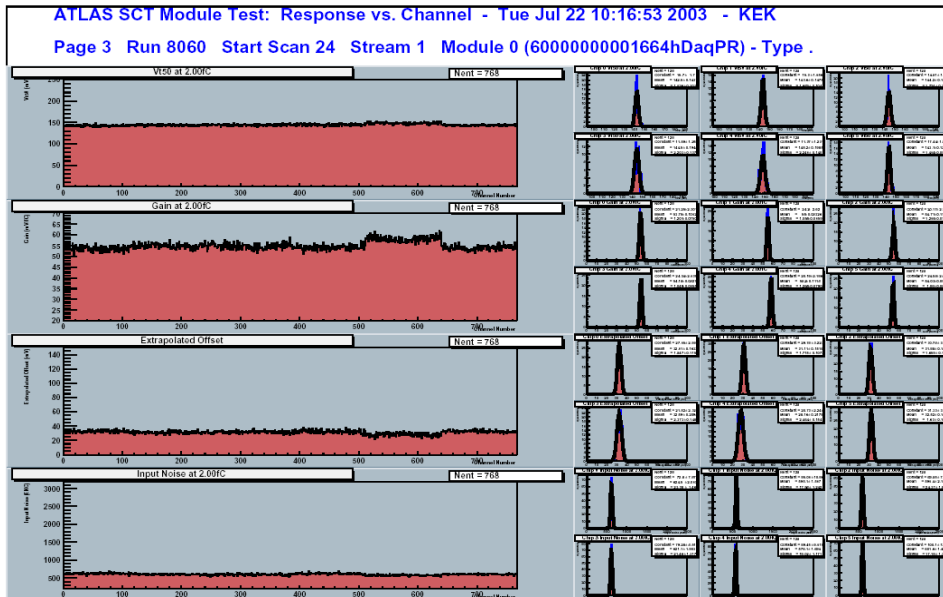
Before trim

@ warm & cold

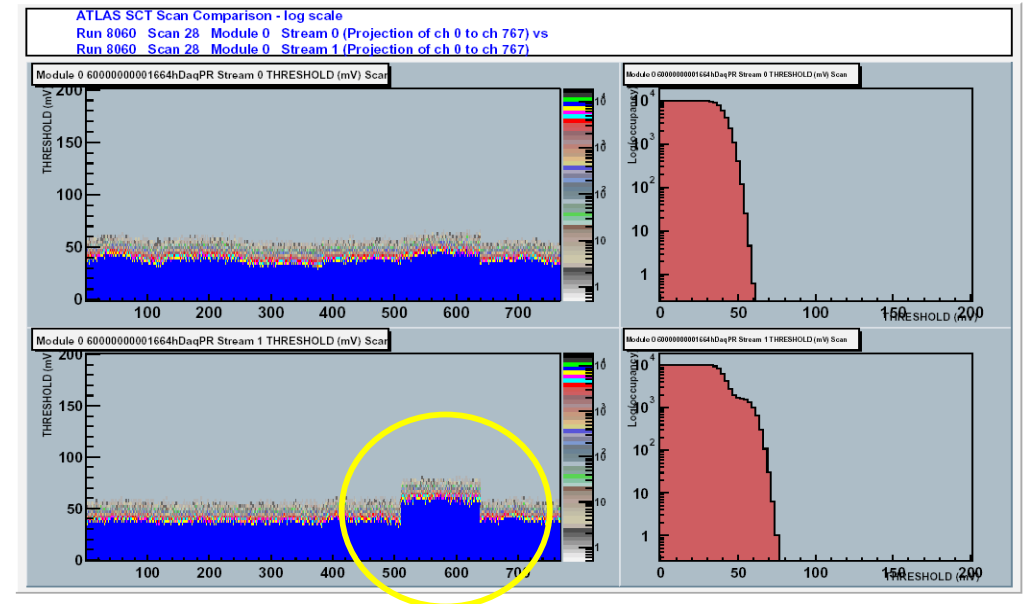
21 ASICs (23%)



After trim (Response Curve)



After trim (Noise :Threshold Curve @0fC)

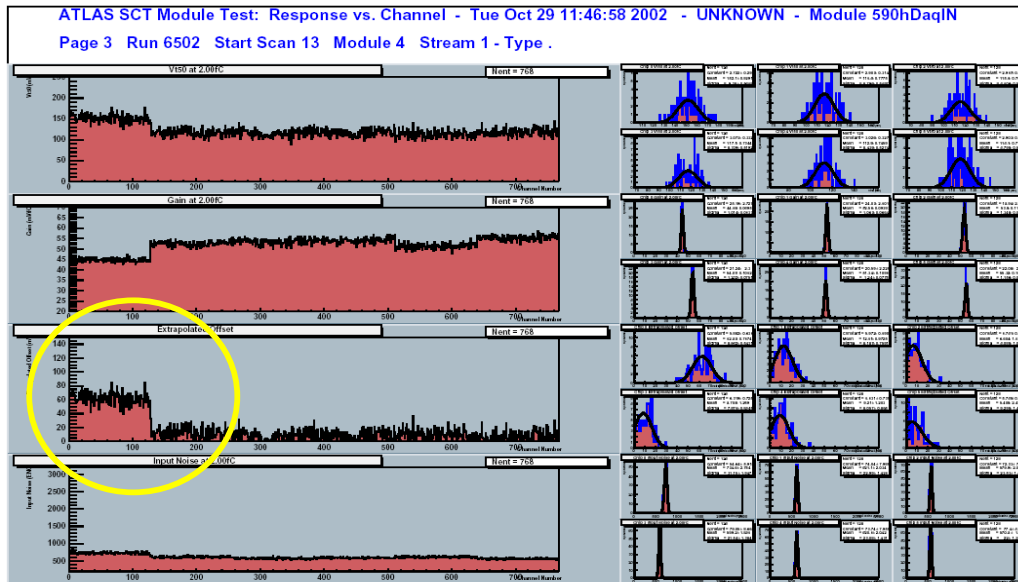


ID = 590 :High Offset : M08 :Z40615-W23-145

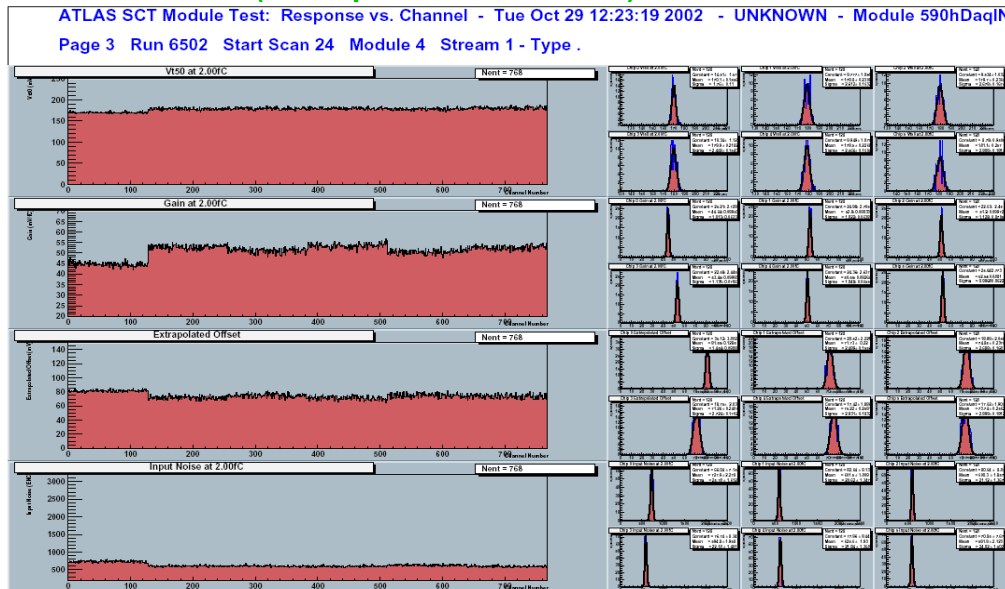
Before trim

@ warm & cold

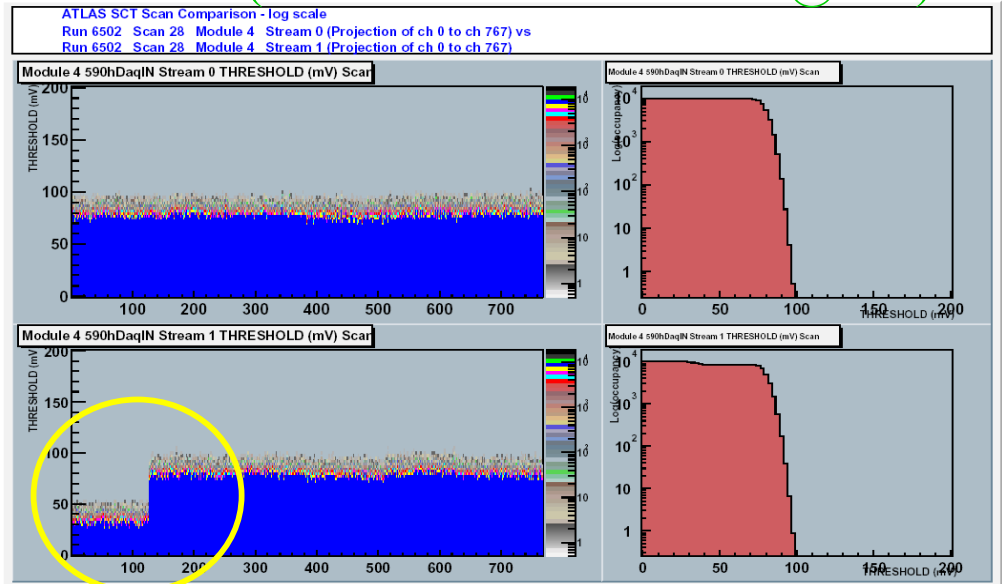
5 ASICs (6%)



After trim (Response Curve)



After trim (Noise :Threshold Curve @0fC)

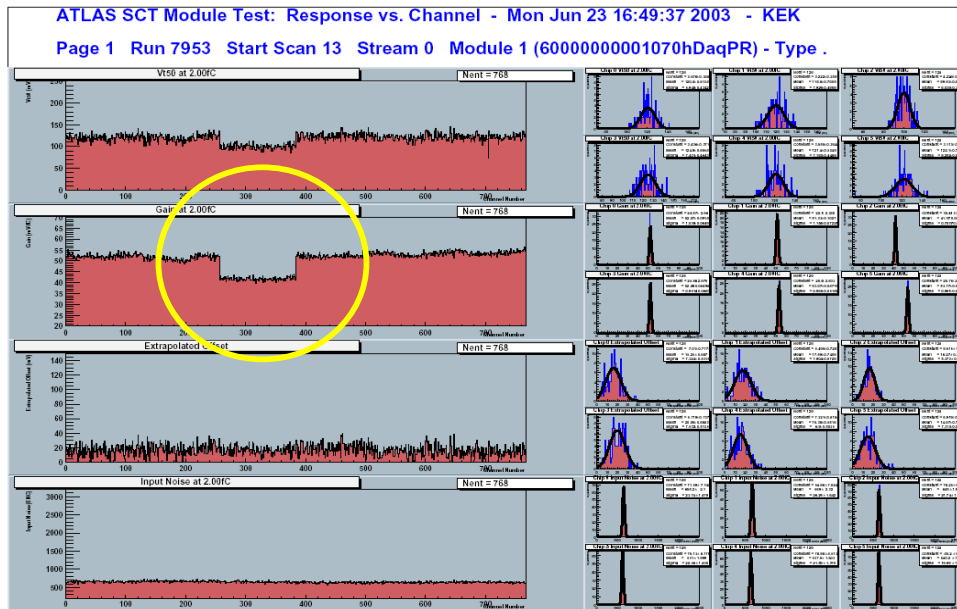


Before trim

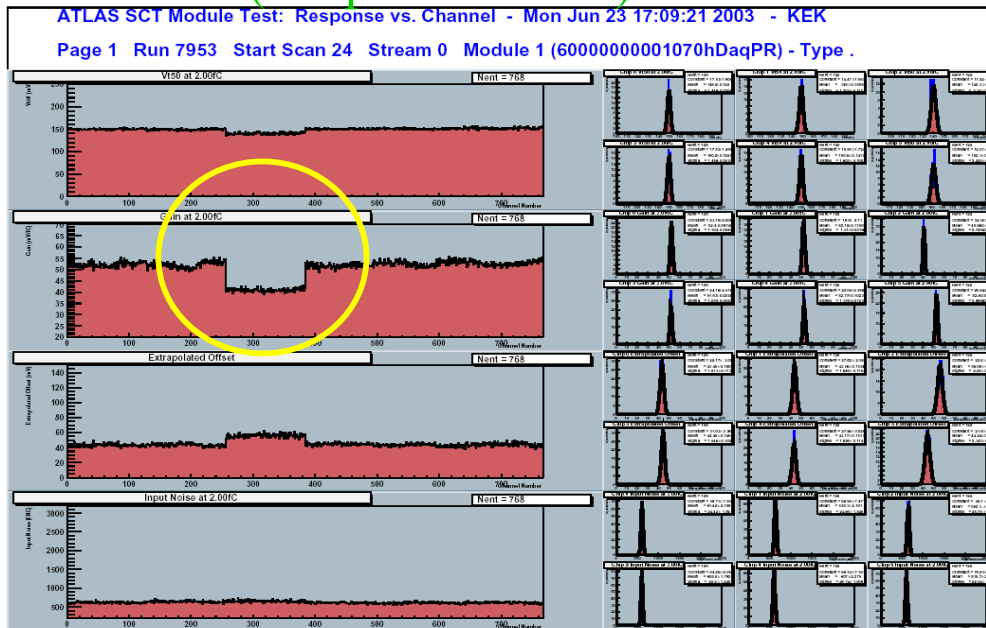
ID = 1070 :Low gain : S02 :Z41125-W07-56

@ warm & cold

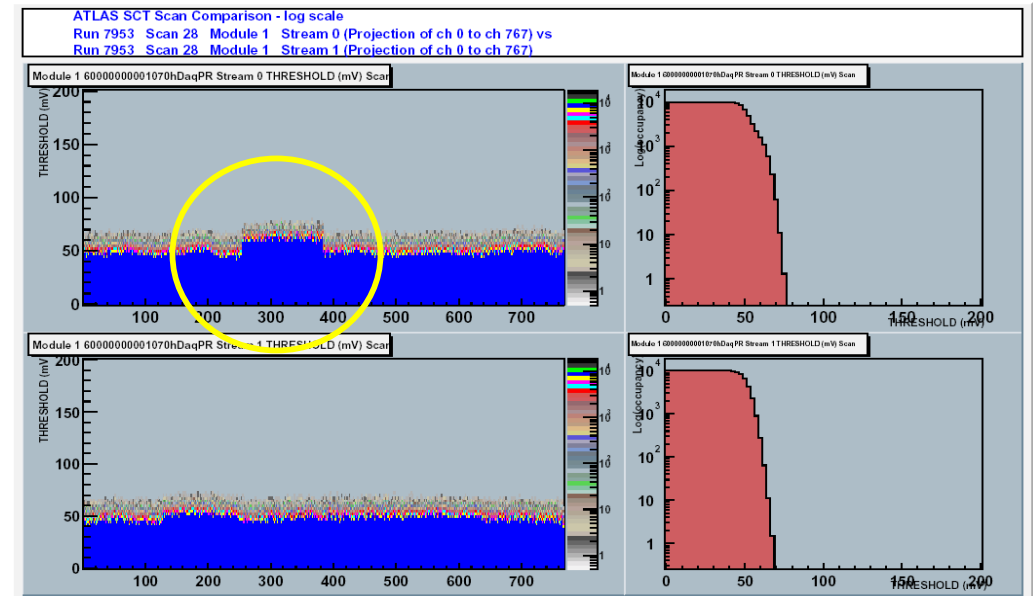
2 ASICs (2%)



After trim (Response Curve)

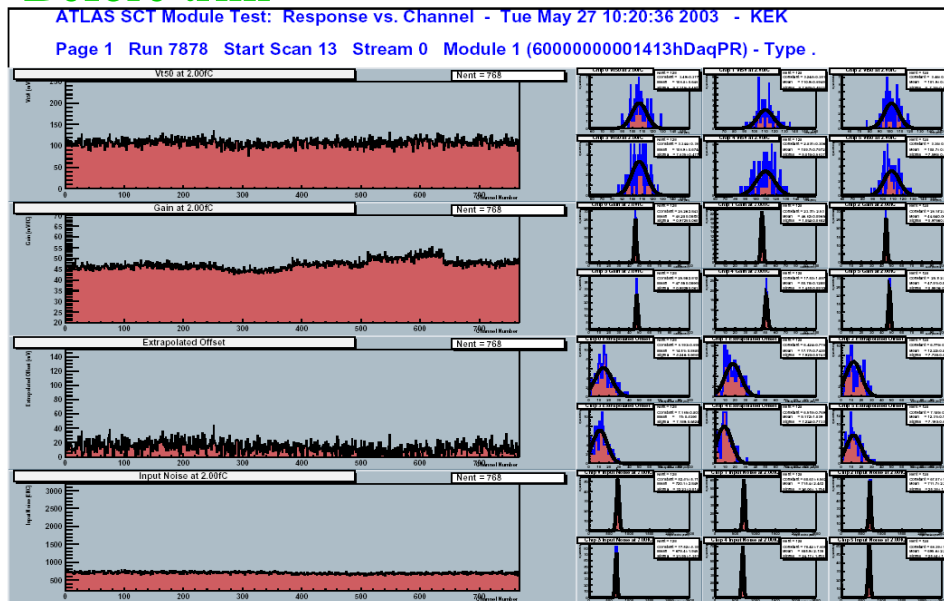


After trim (Noise :Threshold Curve @0fC)



ID = 1413 :Abnormal cal. line : S04 :Z41083-W01-29

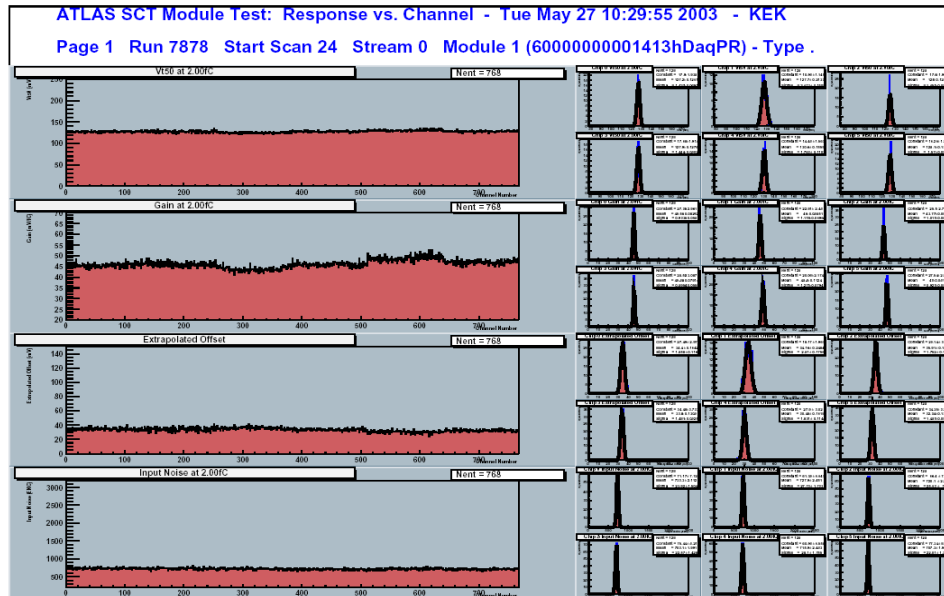
Before trim



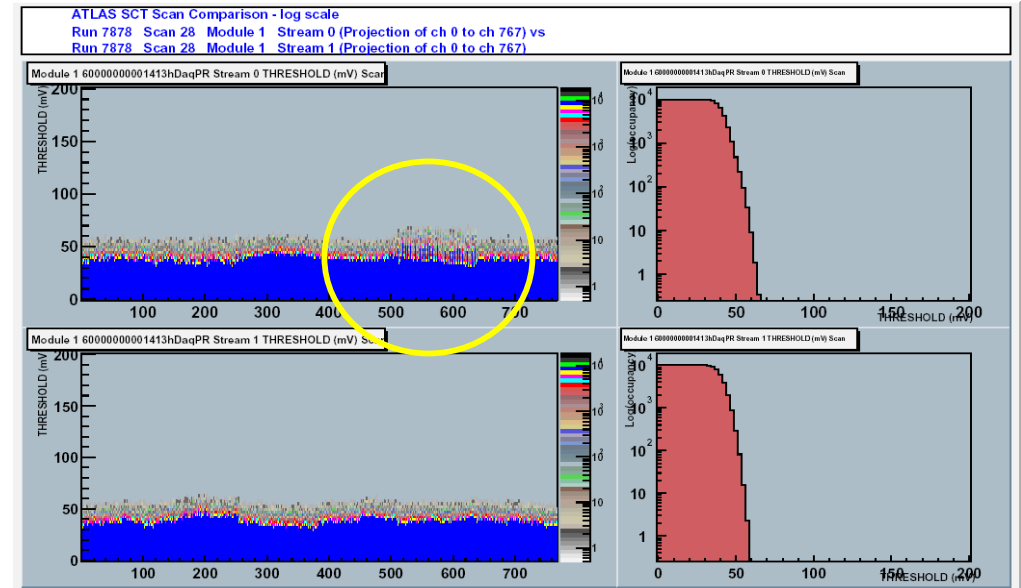
@ warm & cold

7 ASICs (8%)

After trim (Response Curve)



After trim (Noise :Threshold Curve @0fC)

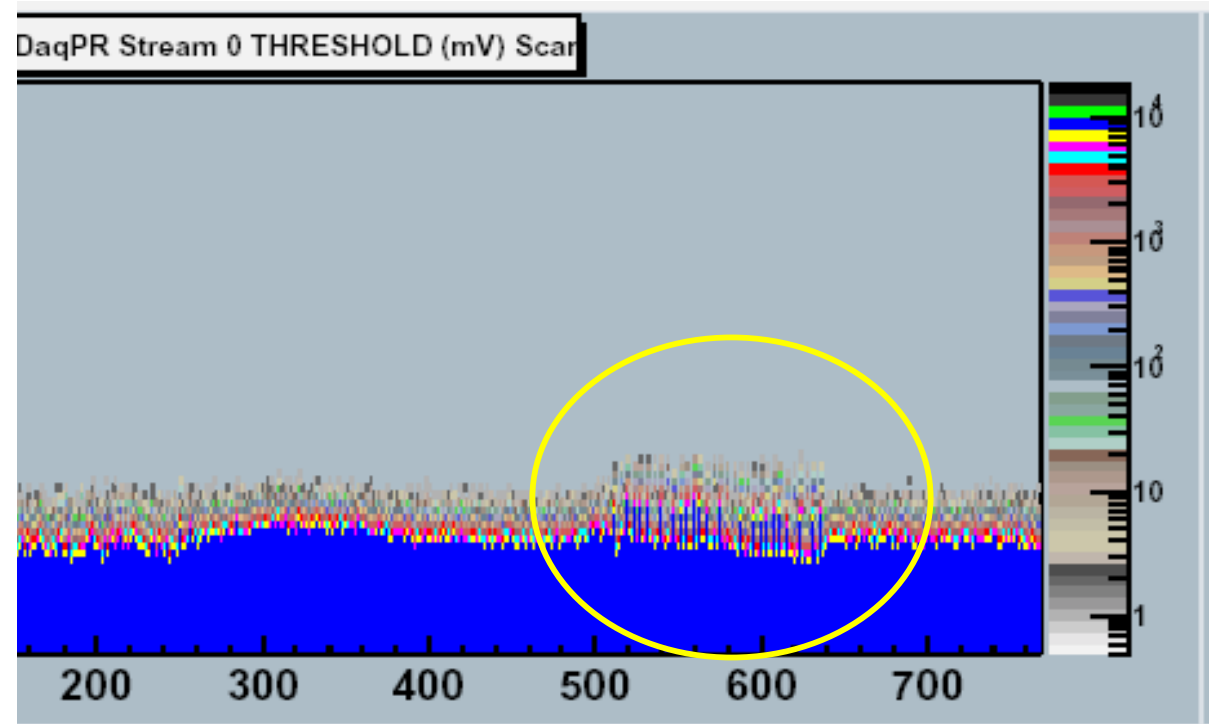
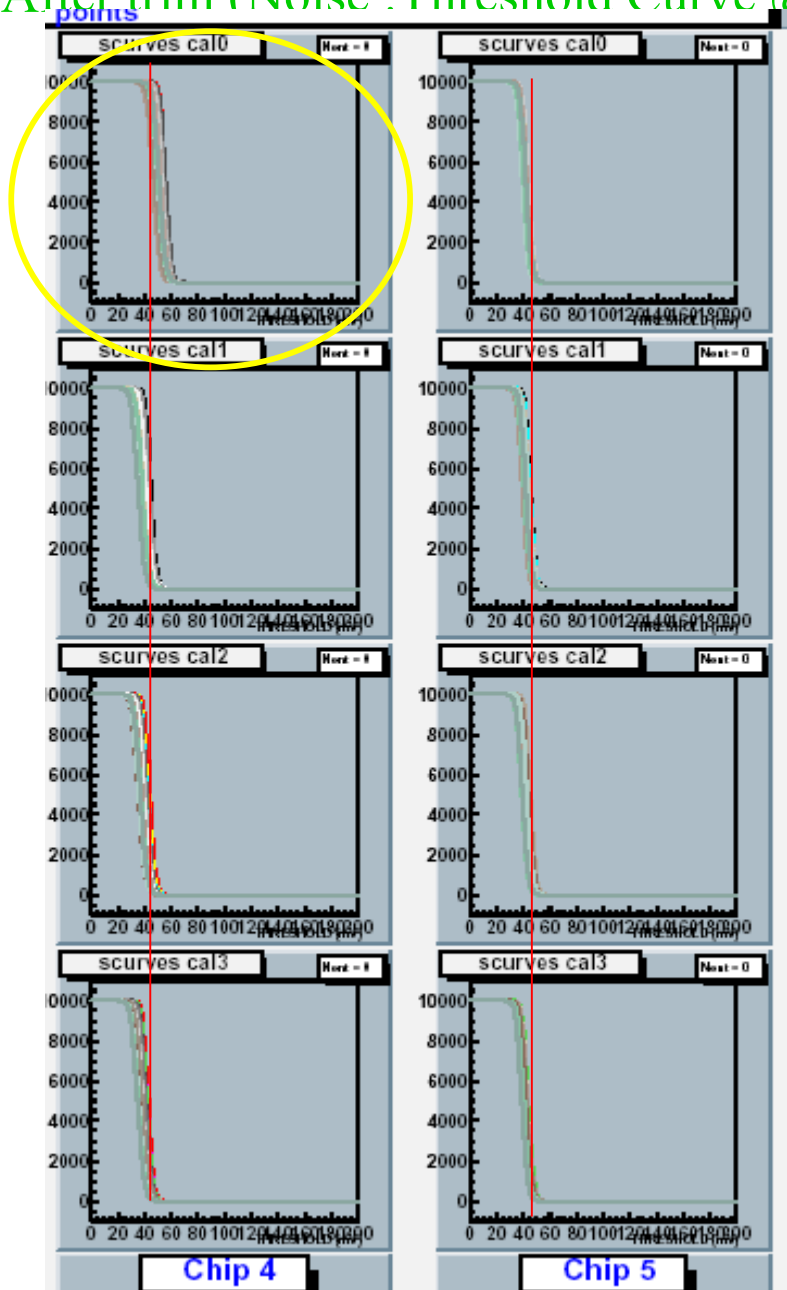


ID = 1413 :Abnormal cal. line : S04 :Z41083-W01-29

After trim (Noise :Threshold Curve @0fC)

@ warm & cold

7 ASICs (8%)

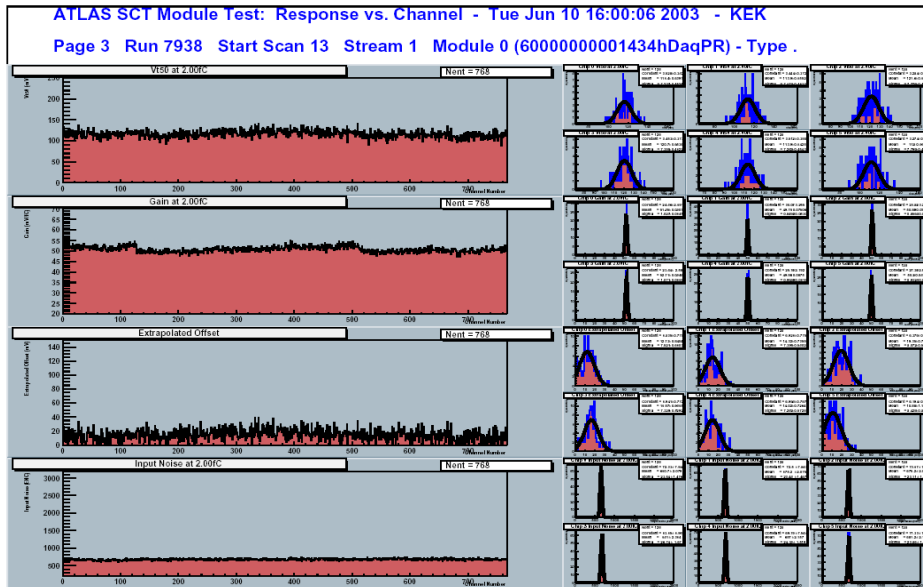


ID = 1434 :SAWTOOTH s-curve: S10 :Z41036-W19-30

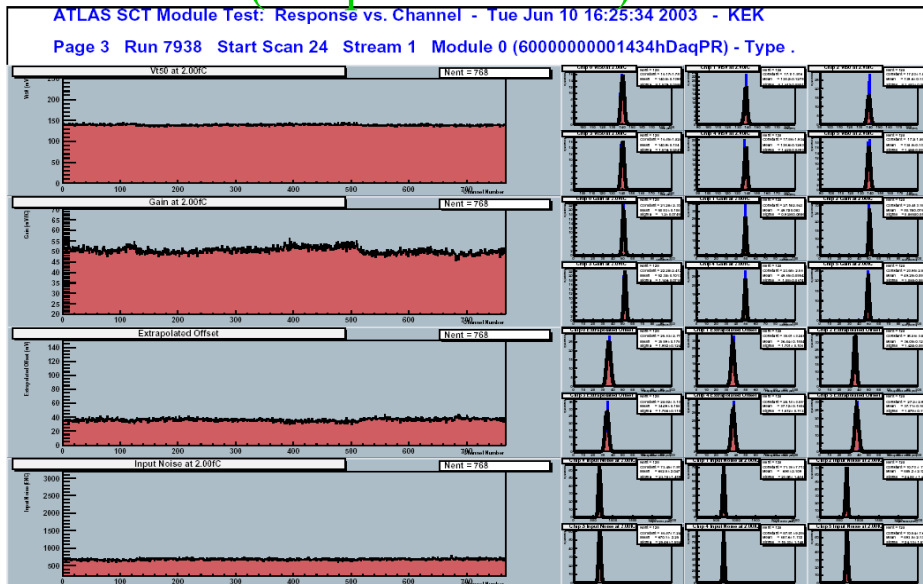
Before trim

@ warm & cold

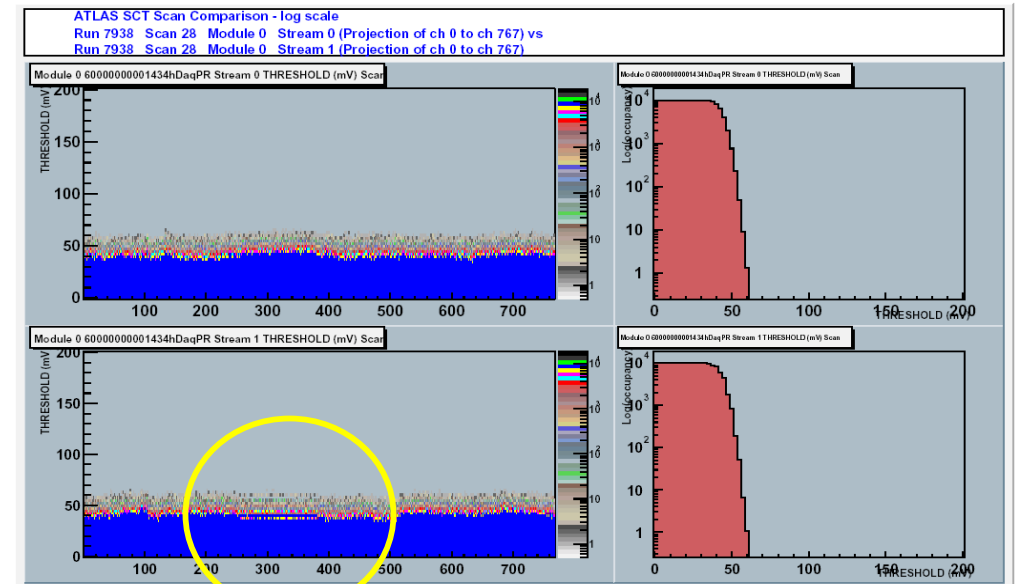
3 ASICs (3%)



After trim (Response Curve)

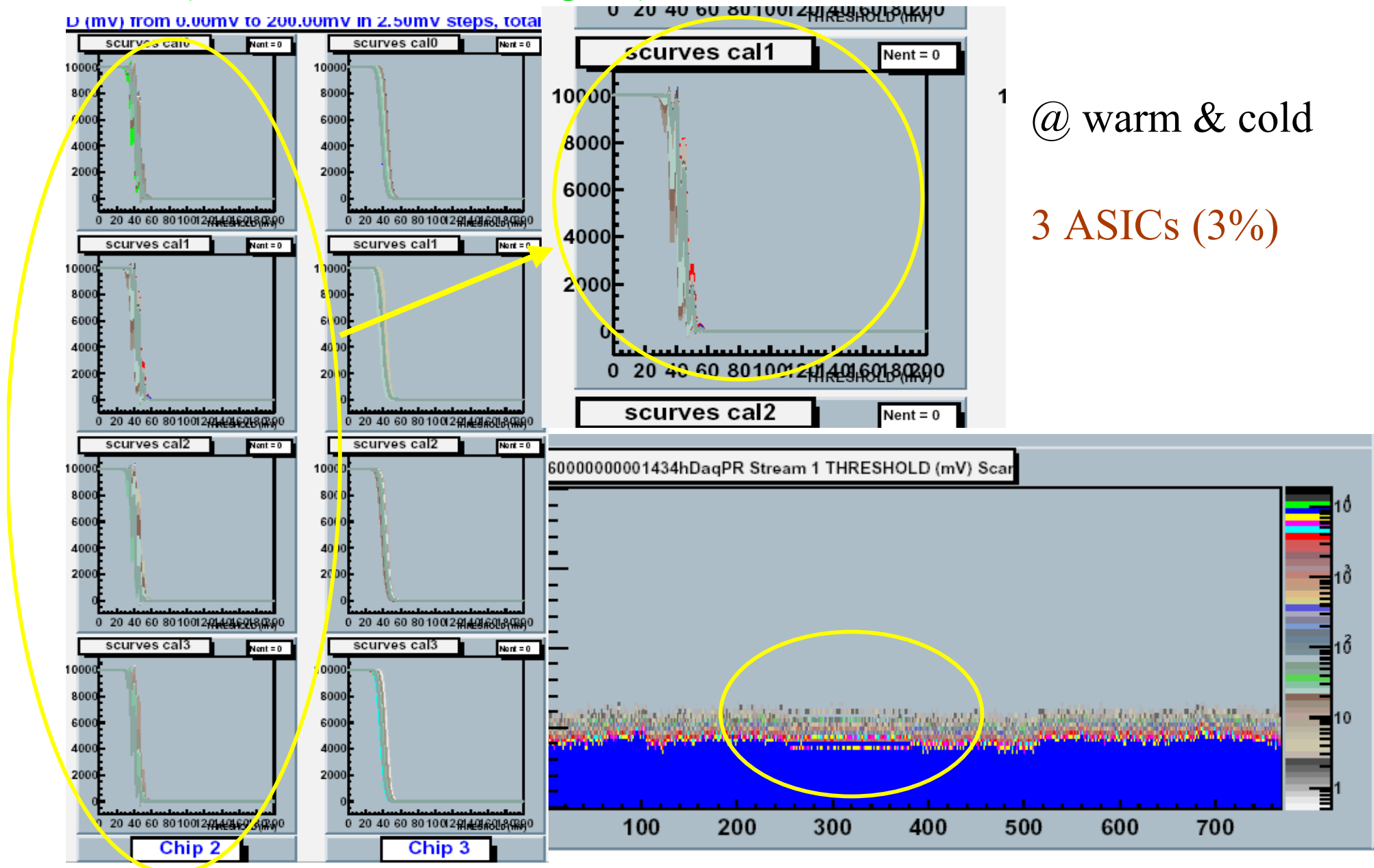


After trim (Noise :Threshold Curve @0fC)



ID = 1434 :SAWTOOTH s-curve: S10 :Z41036-W19-30

After trim (Noise :Threshold Curve @0fC)

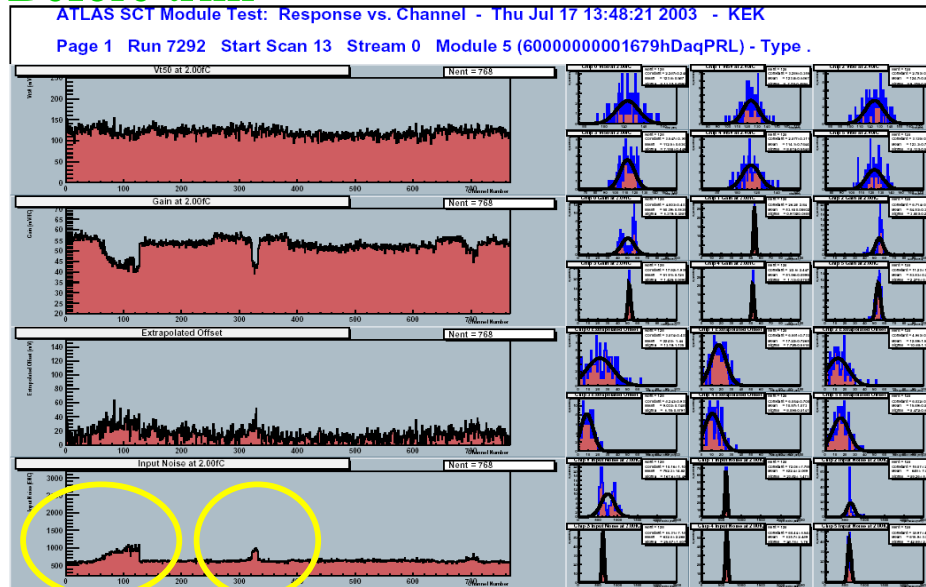


ID = 1679 :Block of "partbonded": M00+S02 :Z40973-W20-148,152

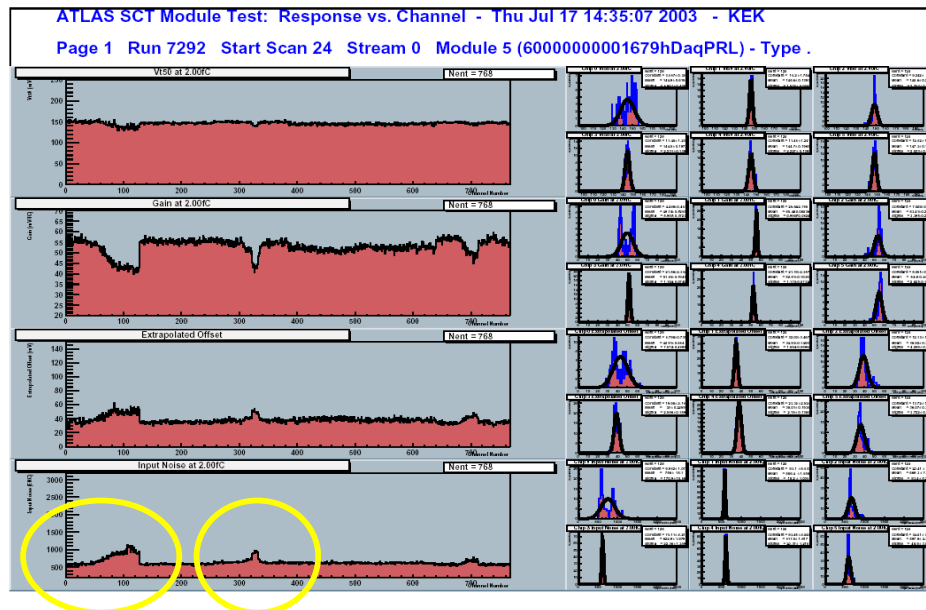
Before trim

@ cold

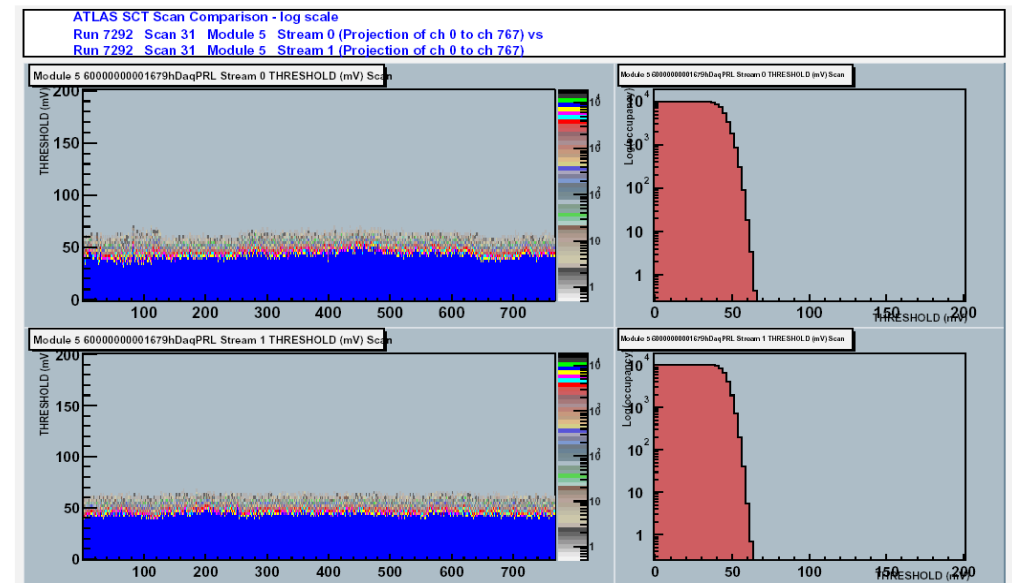
14 ASICs (16%)



After trim (Response Curve)



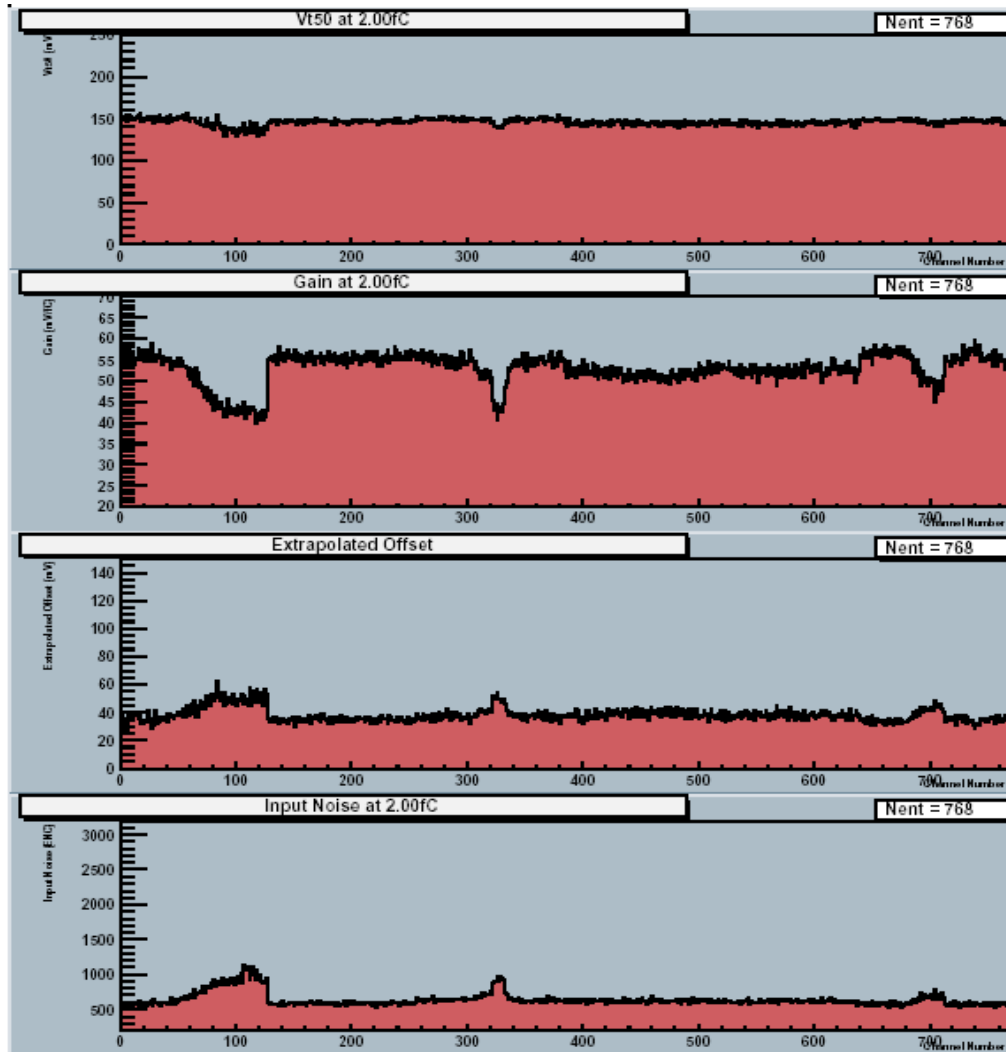
After trim (Noise :Threshold Curve @0fC)



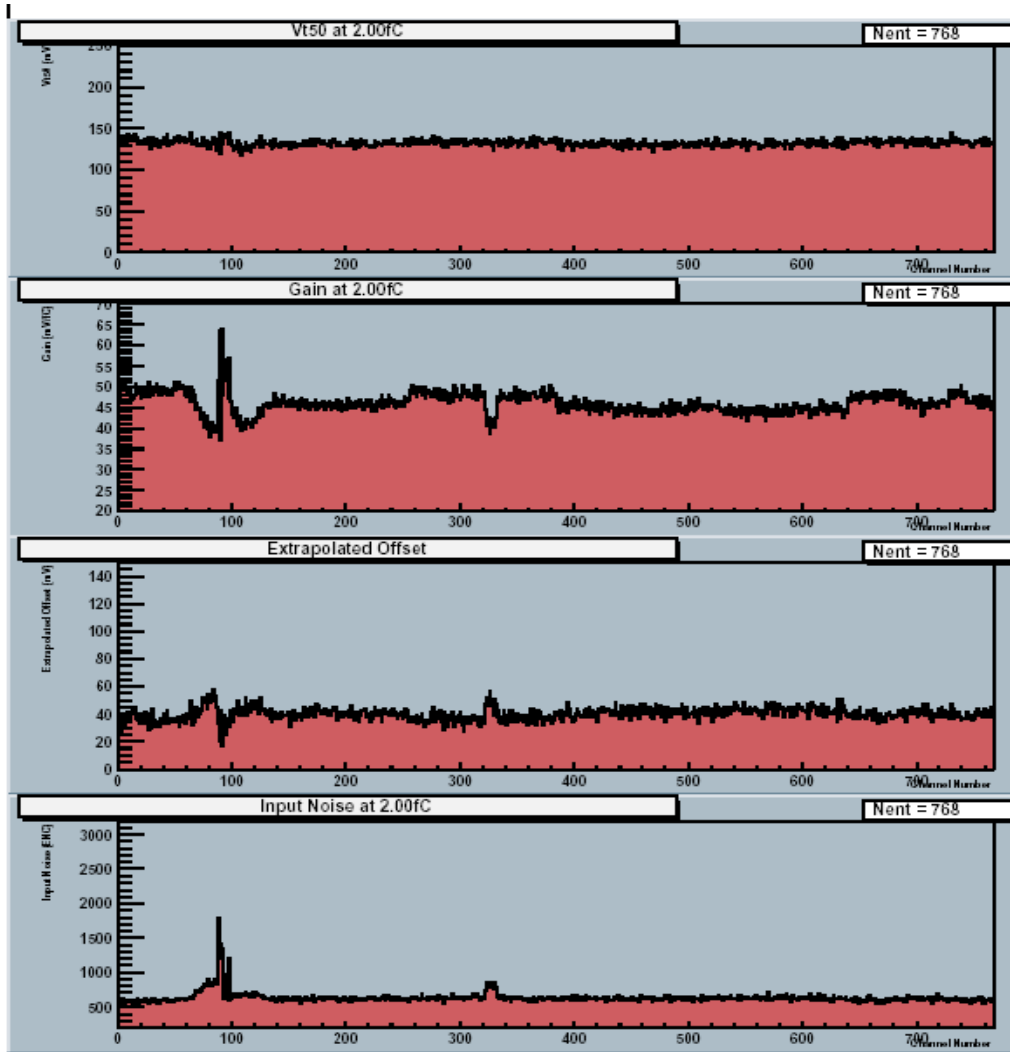
ID = 1679 :Block of "partbonded": M00+S02 :Z40973-W20-148,152

14 ASICs (16%)

Response Curve @cold Ish=30_A



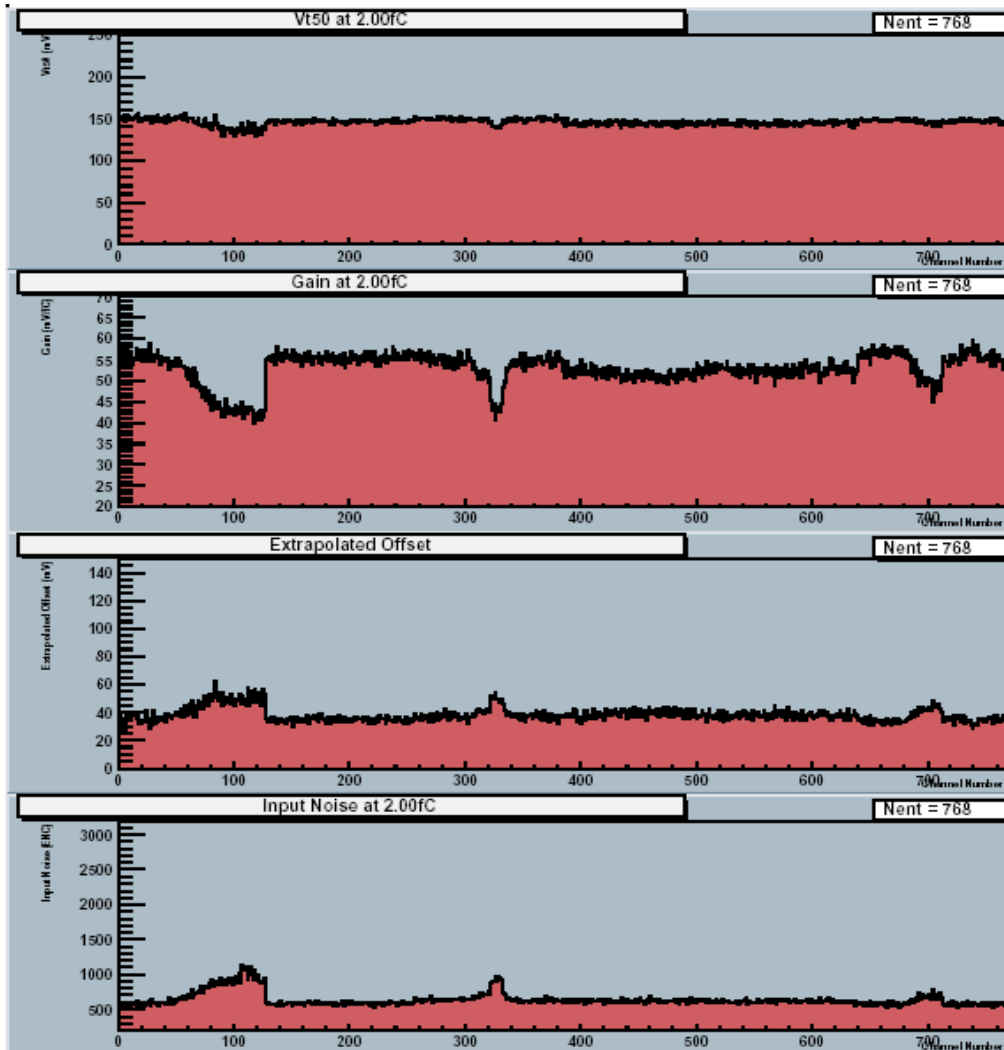
Response Curve @cold Ish=20_A



ID = 1679 :Block of "partbonded": M00+S02 :Z40973-W20-148,152

14 ASICs (16%)

Response Curve @cold Ish=30_A



Response Curve @warm Ish=30_A

