

Cold Module Testing

Setup

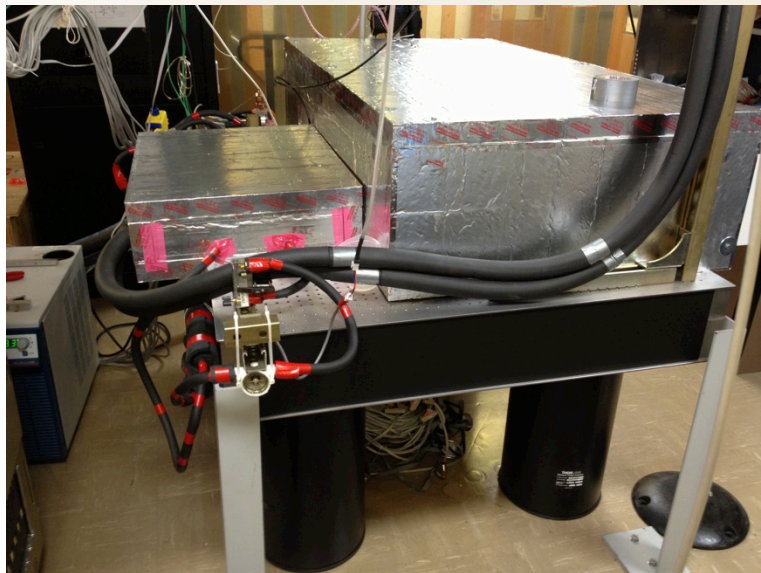
See Tim's talk for details:

[https://confluence.slac.stanford.edu/download/attachments/
138780812/SVTTTest SLAC.pdf?
version=1&modificationDate=1368657864000](https://confluence.slac.stanford.edu/download/attachments/138780812/SVTTTest_SLAC.pdf?version=1&modificationDate=1368657864000)

Setup

1/4" cooling lines

SLAC



Cold box

Dry air outlet

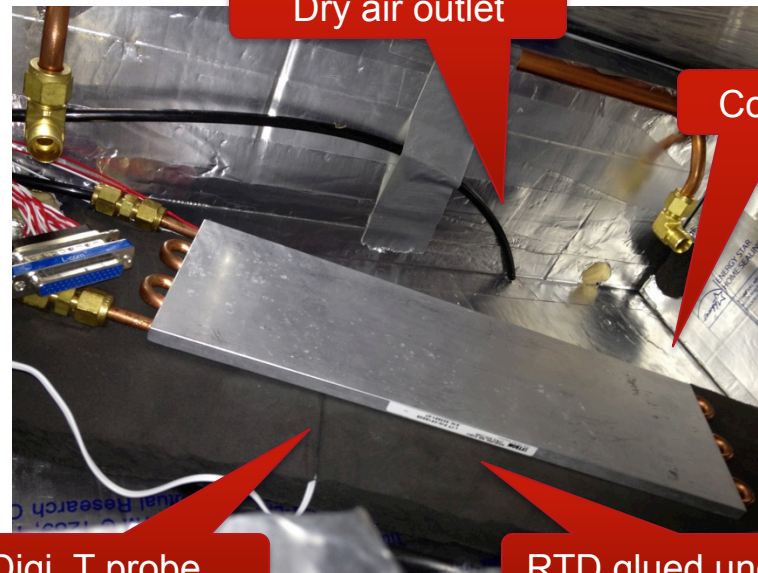
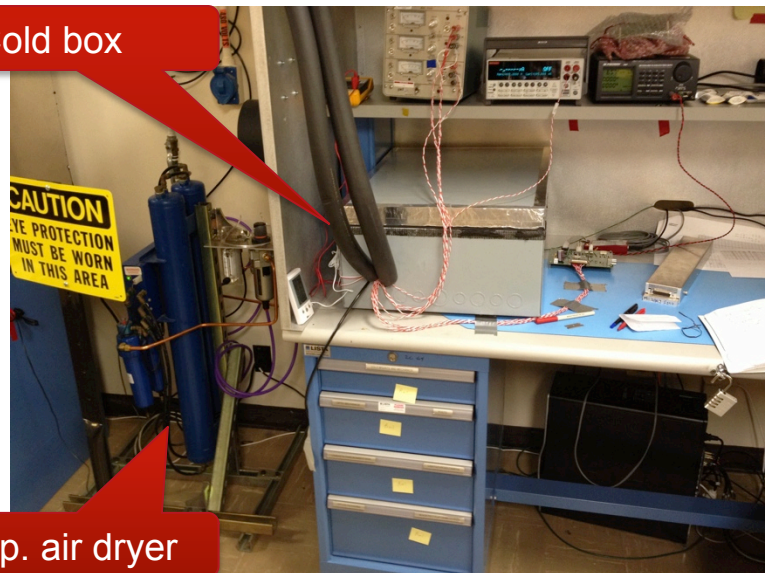
Cold plate

CAUTION
EYE PROTECTION
MUST BE WORN
IN THIS AREA

Comp. air dryer

Digi. T probe

RTD glued underneath



Setup	Flow (GPH)	P_{inlet} (psi)	P_{outlet} (psi)
Manifold	31	24	22
Manifold+cold plate	26	28	16
Manifold+long lines+cold plate	19	33	10

Setup	T_{chiller} (C)	T_{digi} (C)	T_{RTD} (C)	T_{Hybrid} (C)
No tube insulation	+1	6.0	6.2	-
w/ tube insulation	+1	4.6	5.5	7.3,7.34
w/ tube insulation	+10	12.7	13.0	-
w/ tube insulation	+15	16.5	17.0	-

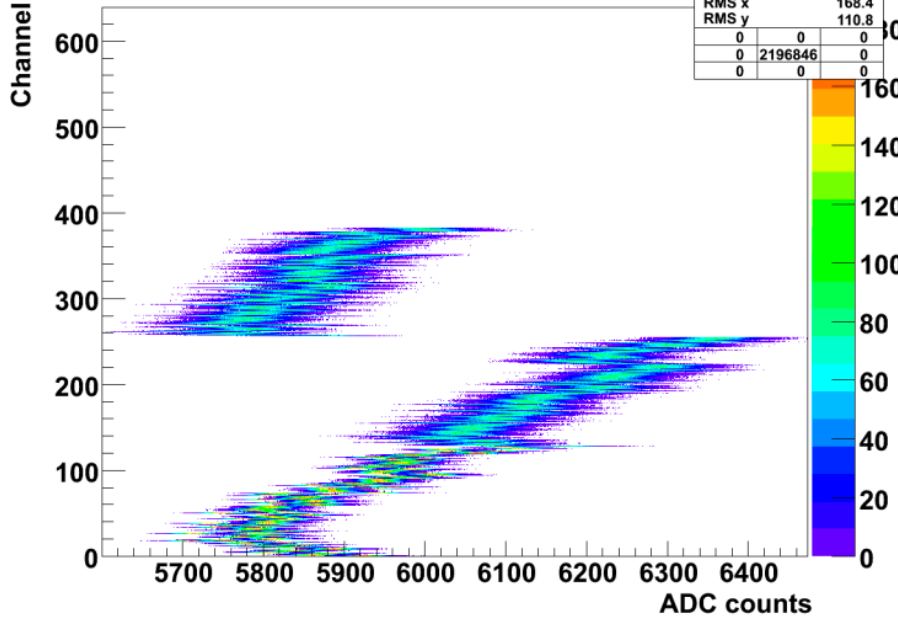
Another example: $T_{\text{digi}}=17.7\text{C}$ \rightarrow hybrid $T=18.8\text{C}$

GIMP baseline

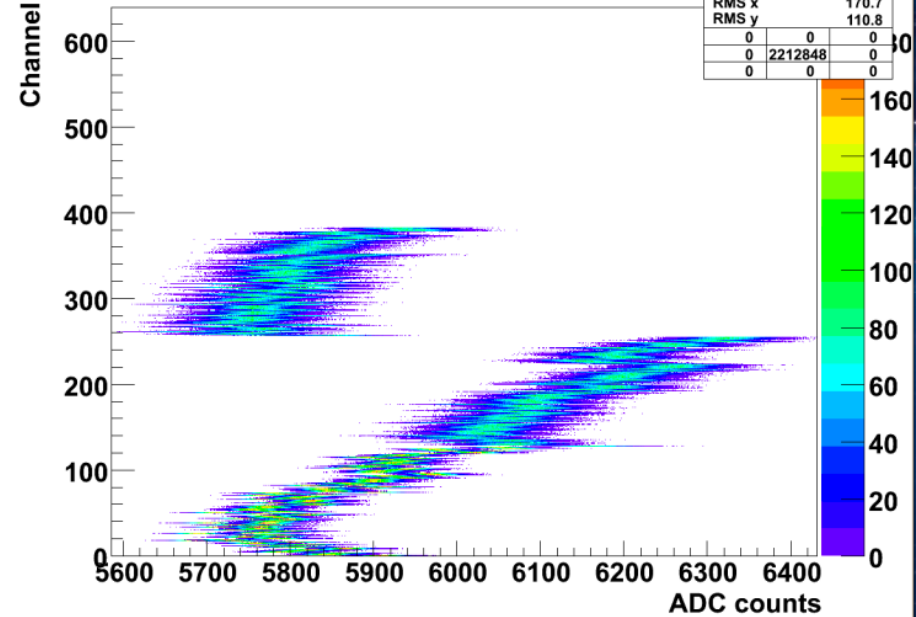
T=+18C

T=+7C

Baseline values, all samples



Baseline values, all samples

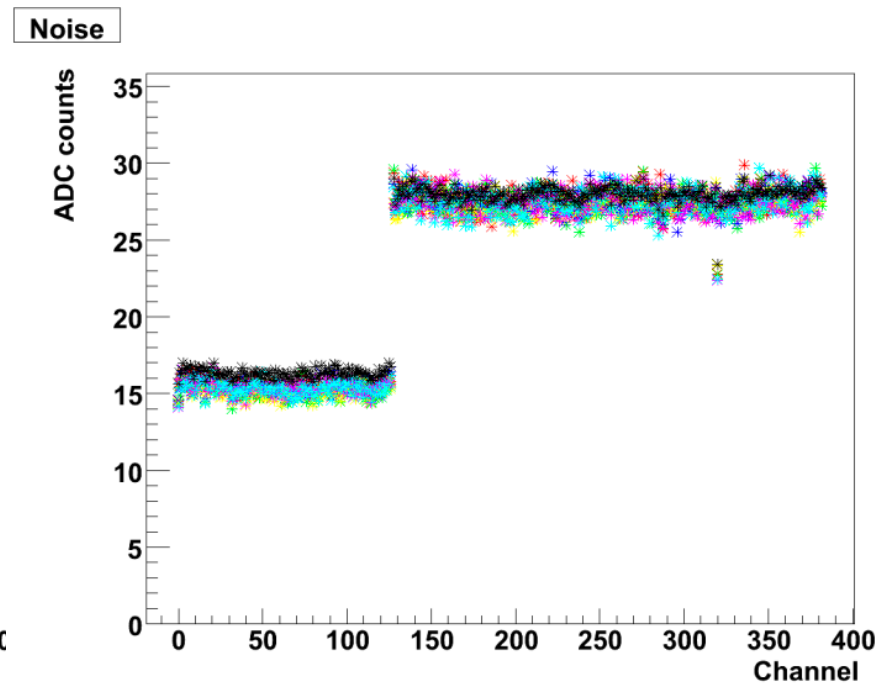
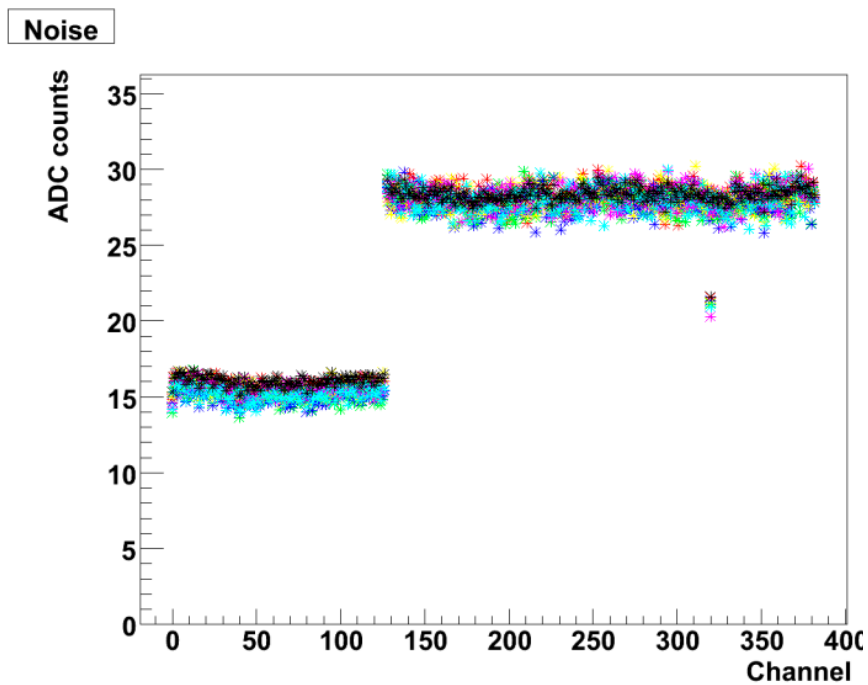


$V_{\text{bias}} = 21\text{V}$

GIMP noise

T=+18C

T=+7C



$V_{\text{bias}} = 21\text{V}$