

PASSPORT, SiWLC ECAL SLAB XX

SLAB ID

Slab ID :

ASU version :

Skiroc version :

NASICS :

DIF ID :

Firmware version :

SBM ID :

SMBversion :

Wafer ID/Info :

Comments :

Commisionong by :

at :

setup :

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SOLDERING POINTS, CABLING, etc (visual inspection)

With closed aluminum cover, turn around the slab and check soldering points in :

- DIF resistors (for slow control)
- HV grounding (GND)

comments and others :

Turn slab around, open aluminum cover and do a check of soldering points :

- HV (bottom slab)

comments and others :

ELECTRICAL + SIGNAL CHECKS (multimeter)

Electrical checks (NOT POWERED SLABS)		
		Comments
GND/PCB		
RESISTOR/DVDD		
SlowControl :		
S4-S16		
SRIN-SROUT		
Readout Return S9-S21		
GND HV and bottom PCB		
No shortcuts between VDDA/VDD/GND		

Electrical checks (Low Voltage on)		
		Comments
Green LED in SLAB		
BLUE LED light (DIF) blinking		
1.2V and 2.5V in J3 and J4 (DIF)		
VDDA		
VDDD		
Configure : RED LED blinks		
Check DIF memory		

Comments :

DAQ SETUP

Short acquisitions tests :

- *spill 2Hz, width 5 ms, BT mode*
- *1 minute*
- *dif_1_1_1*

Find noisy, curves

- *spill 2Hz, width 2.5ms, BT mode*
- *dif_1_1_1*

Cosmics

- *spill 4Hz, width 200ms, BT mode*
- *1h*
- *dif_1_1_1*

CALICOES/PYRAME VERSION :

DATA/RESULTS folder :

SlowControl :

ANALYSYS code :

COMMENTS : (*suspicious ADC=4 channels masked by default*)

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short ACQ tests

NOISE_1 : Make short acquisition and convert the data → Conversion ok ?

NOISE_2 : Cover slab, make short acquisition and convert data → Conversion ok ?

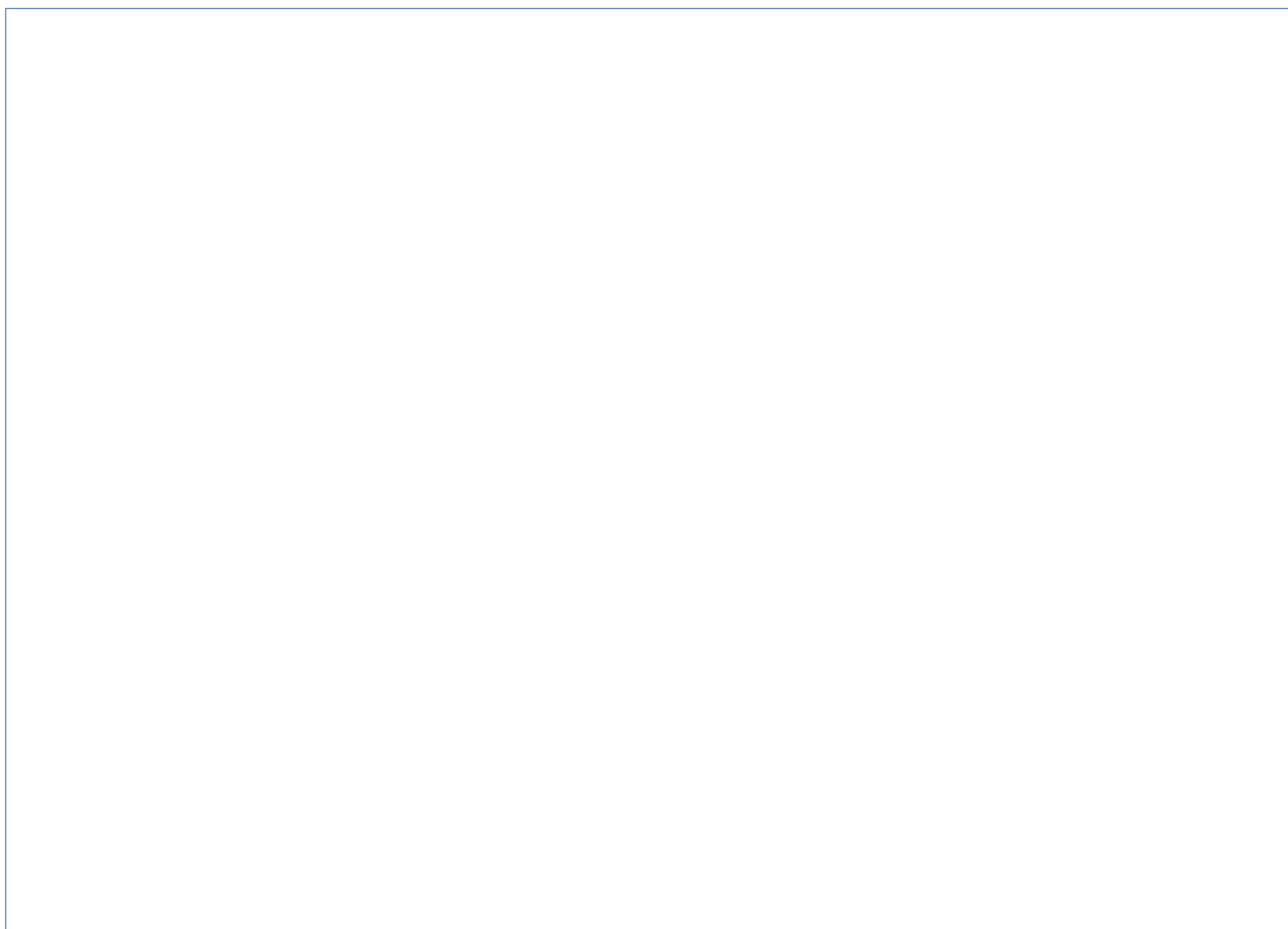
Close slab, put copper scotch in the laterals, place it in the PVC prototype, cover it with black waste bag, HV power.

NOISE_3 : Short acquisition, convert data → conversion ok ?

Wait 30 minutes (HV stabilization)

Comments :

HV current vs time plot



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FIND NOISY :

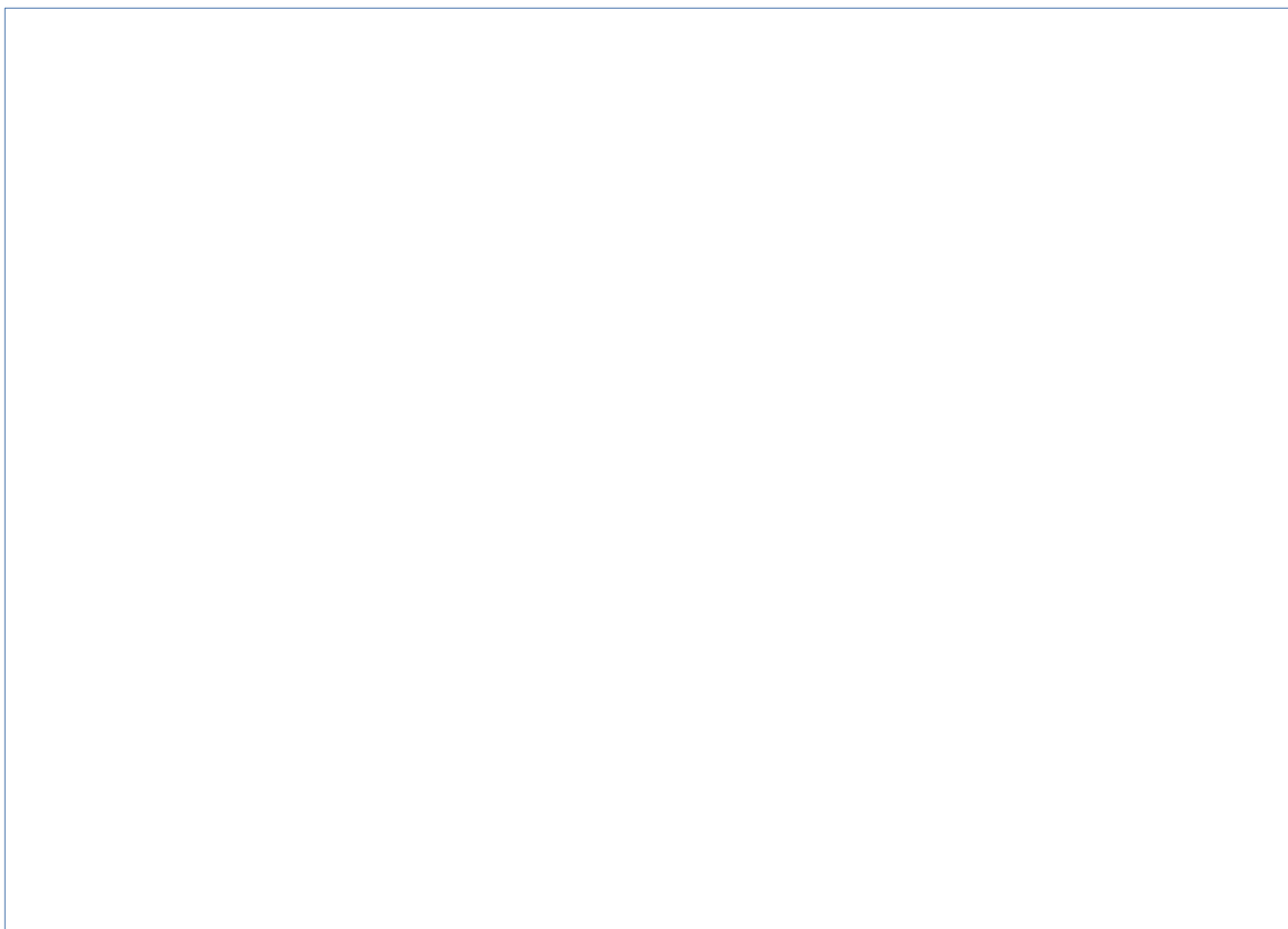
Algorithm :

Outuput/cmd file: Maskchannels.cmd

List of channels :

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Find noisy map :

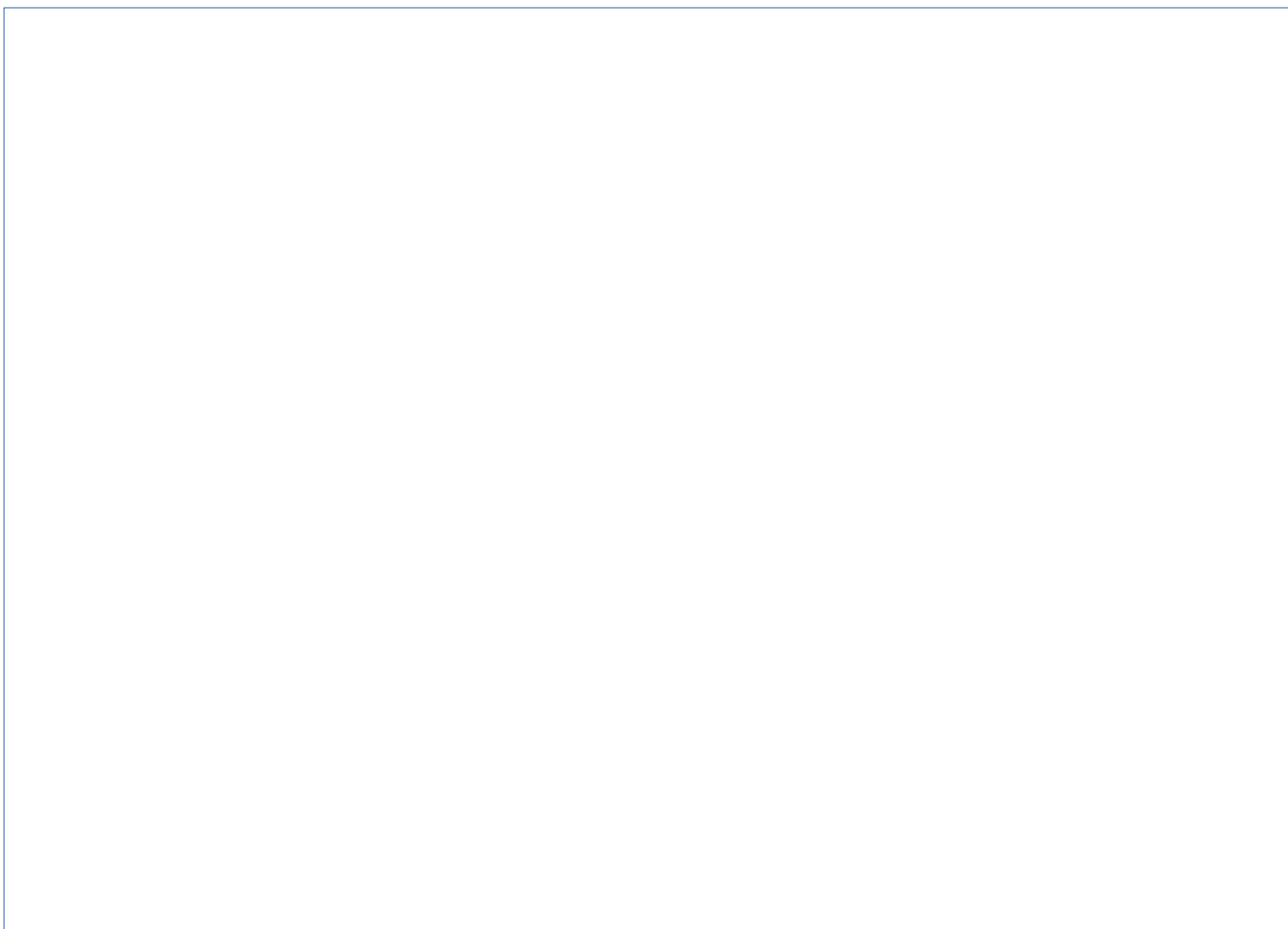


SCURVES :

Algorithm :

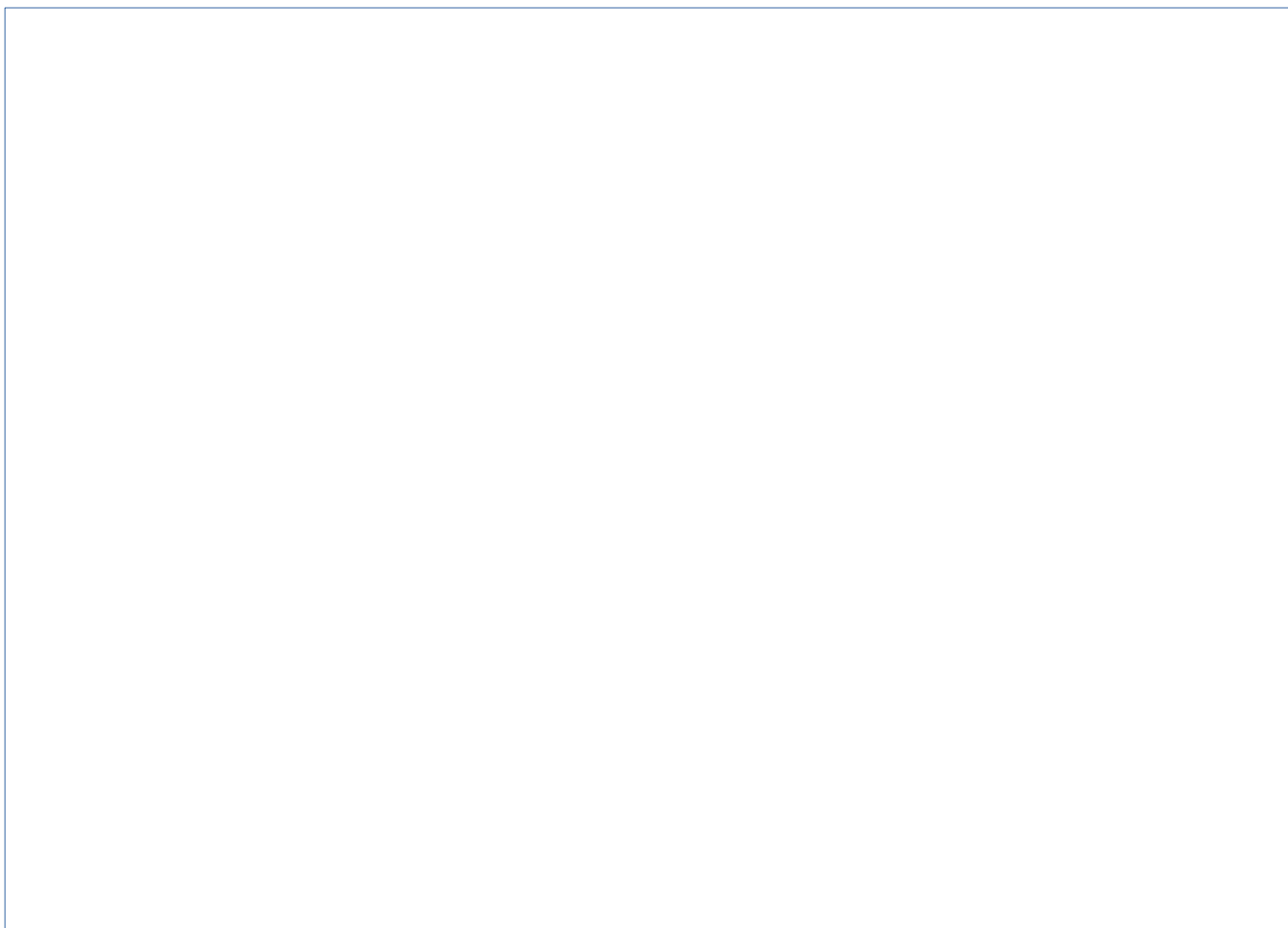
Outuput/cmd file: .thresholds.cmd

Scurve, error funtion central value sigma :



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Scurve, error funtion central value sigma :



Final et of thresholds (mean value + 3 sigma) per chip :

COSMICS:

Algorithm :

DIF

Wafer 1 : Alive cells : Cosmic rate : MIP :	Wafer 3 : Alive cells : Cosmic rate : MIP :
Wafer 2 : Alive cells : Cosmic rate : MIP :	Wafer 4 : Alive cells : Cosmic rate : MIP :

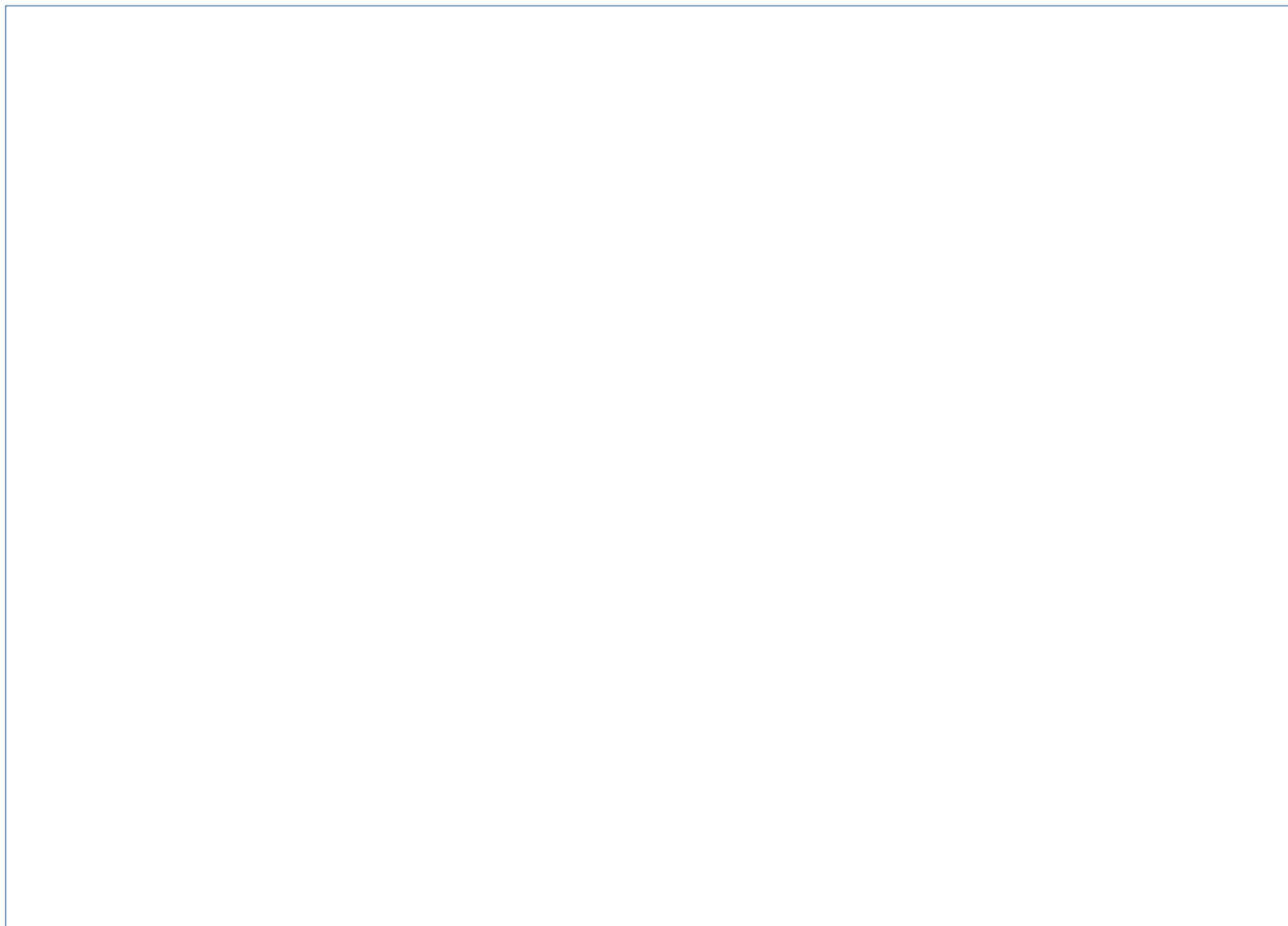
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Plots :

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SUMMARY:

HV current vs time plot



Comments :