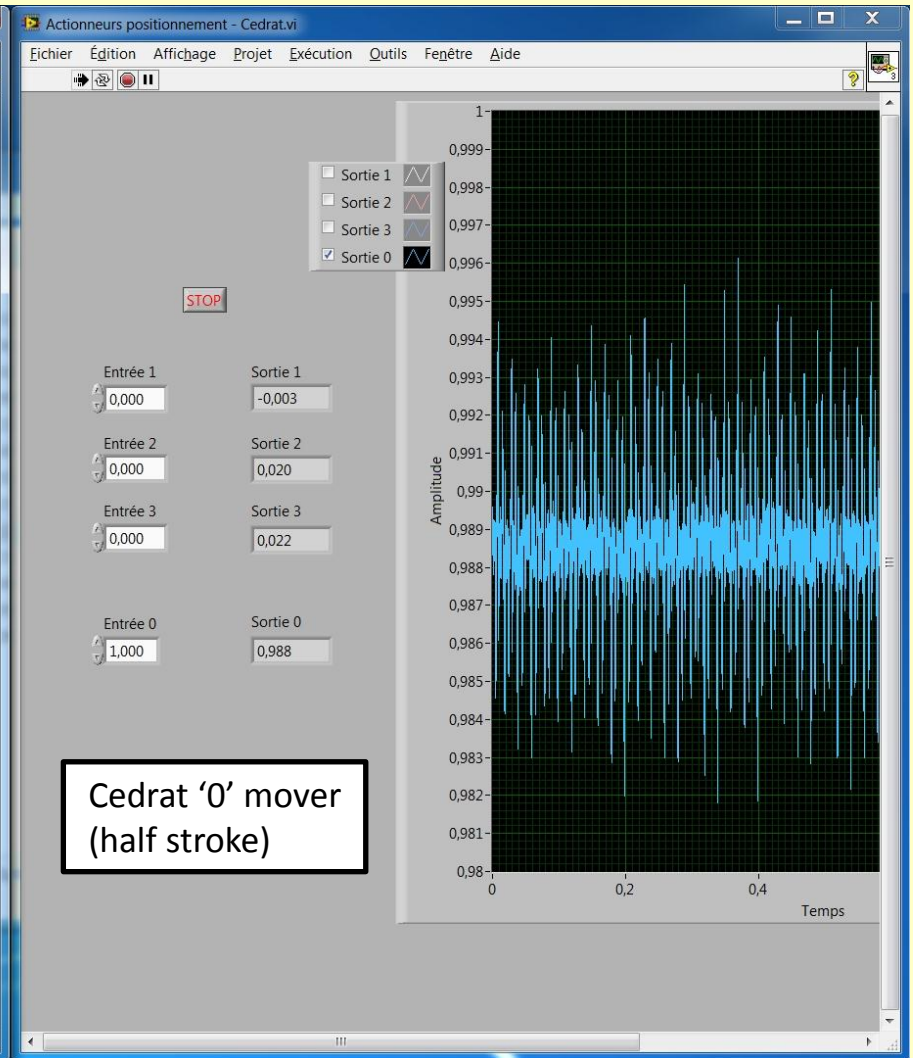
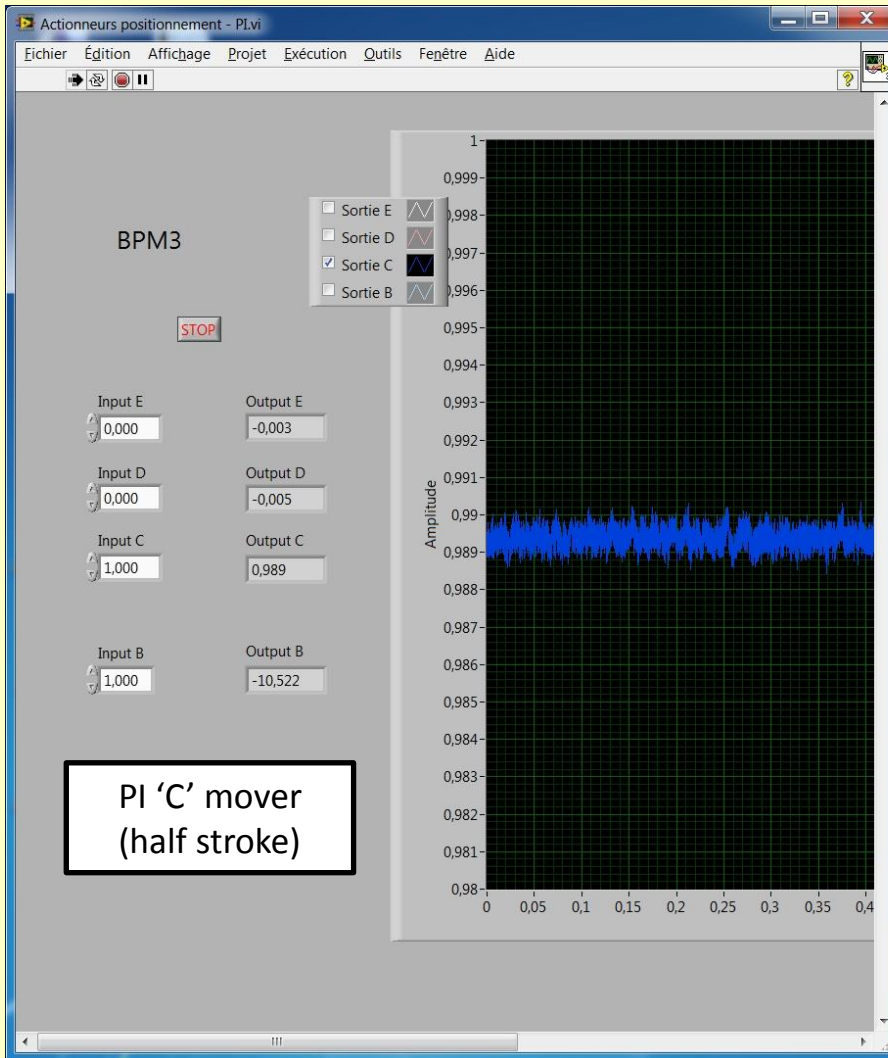
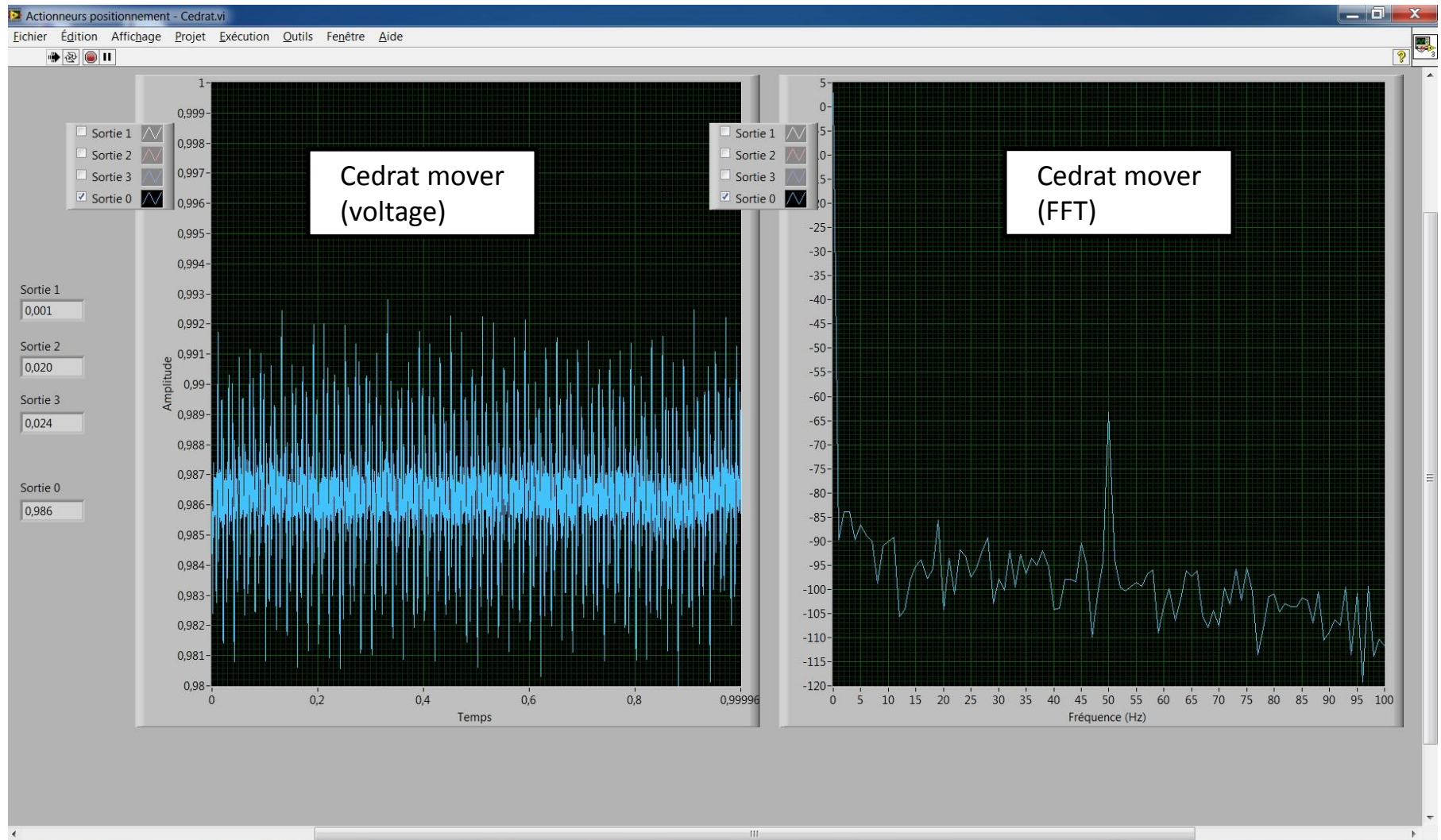


BPMs movers & electrical wiring status

BPM movers



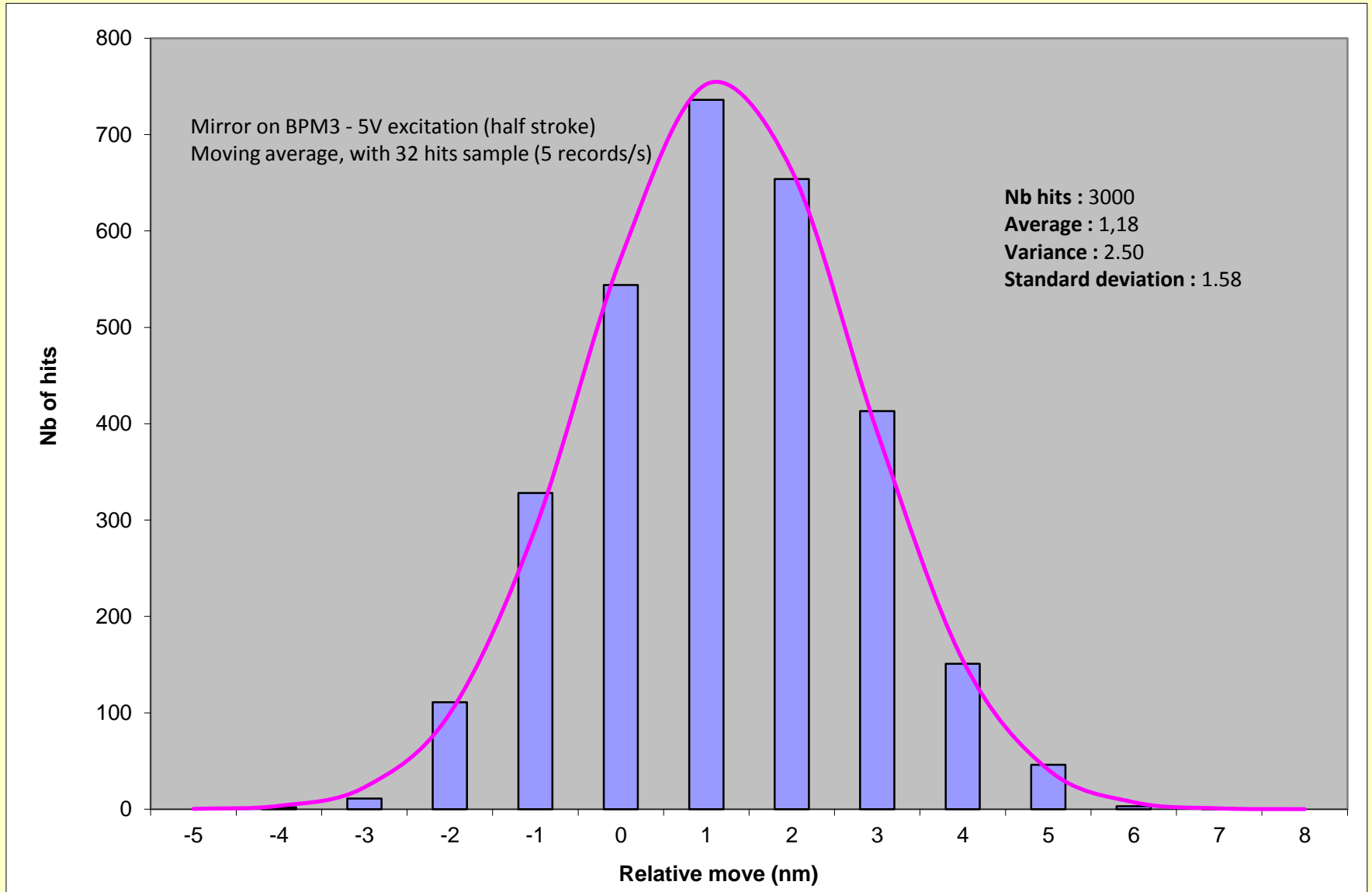


Electrical defect
on strain gauges readout

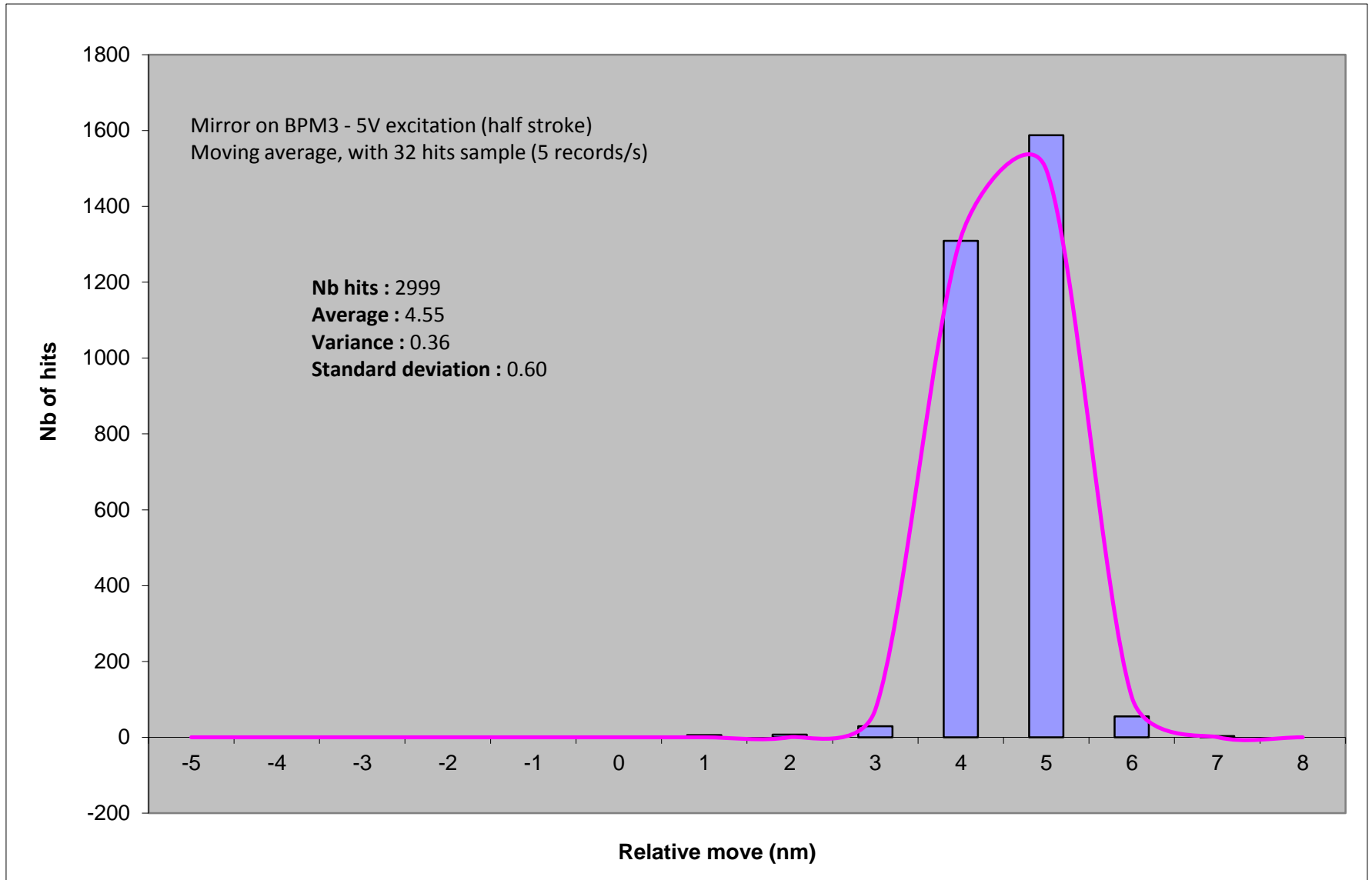


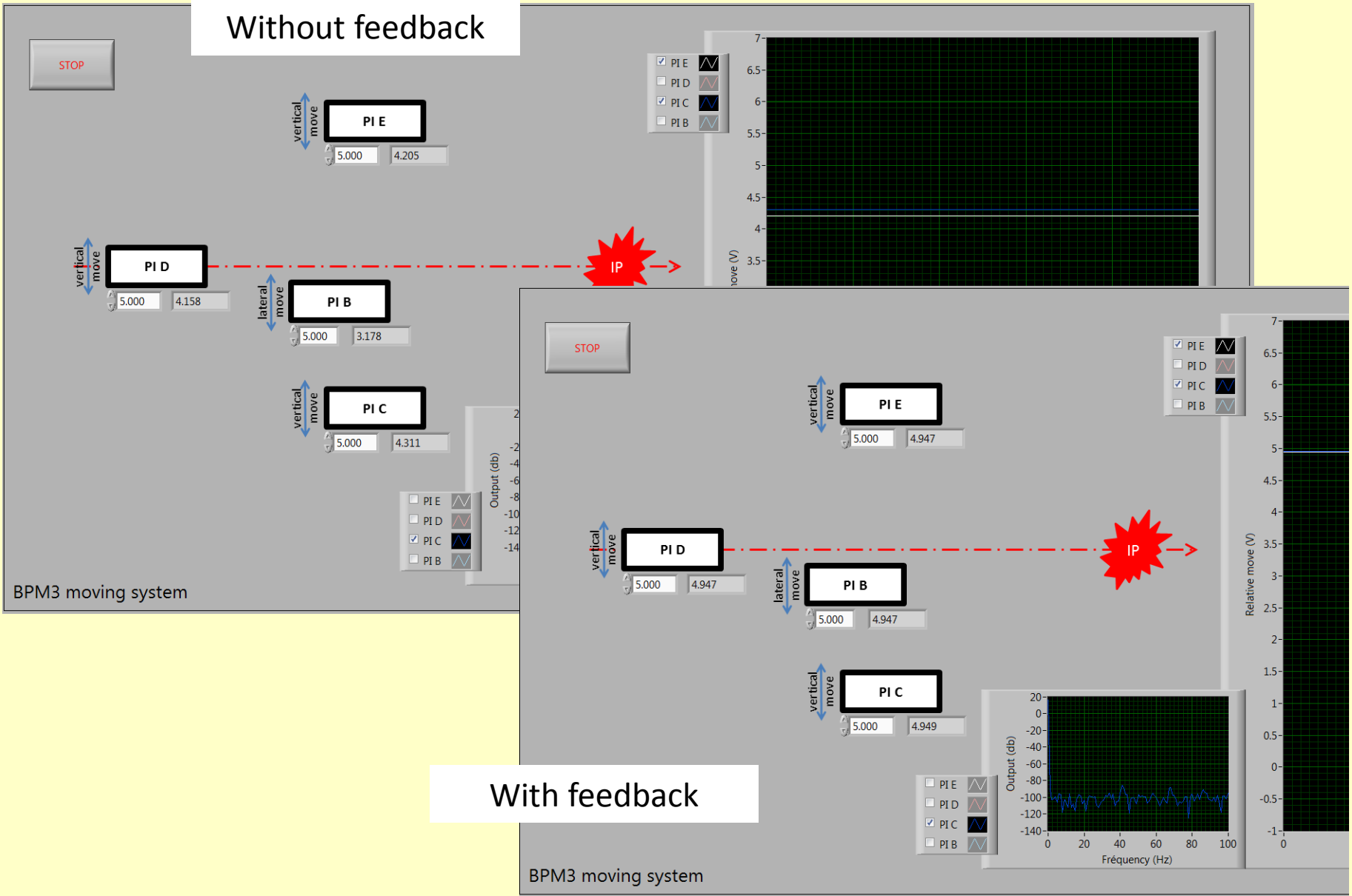
Back to Cedrat office (shield problem)
Return to LAL on week 13 !!!

With feedback

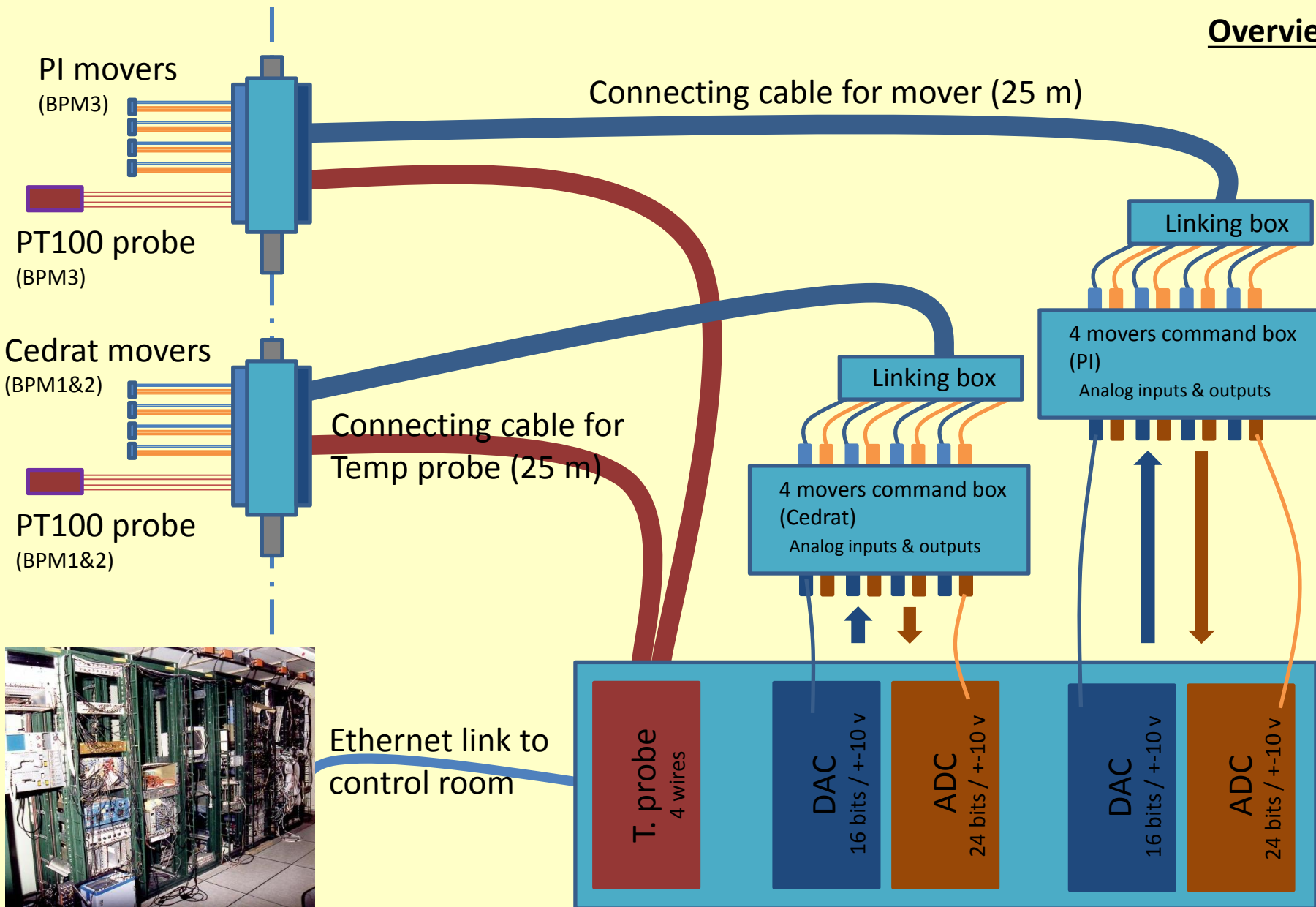


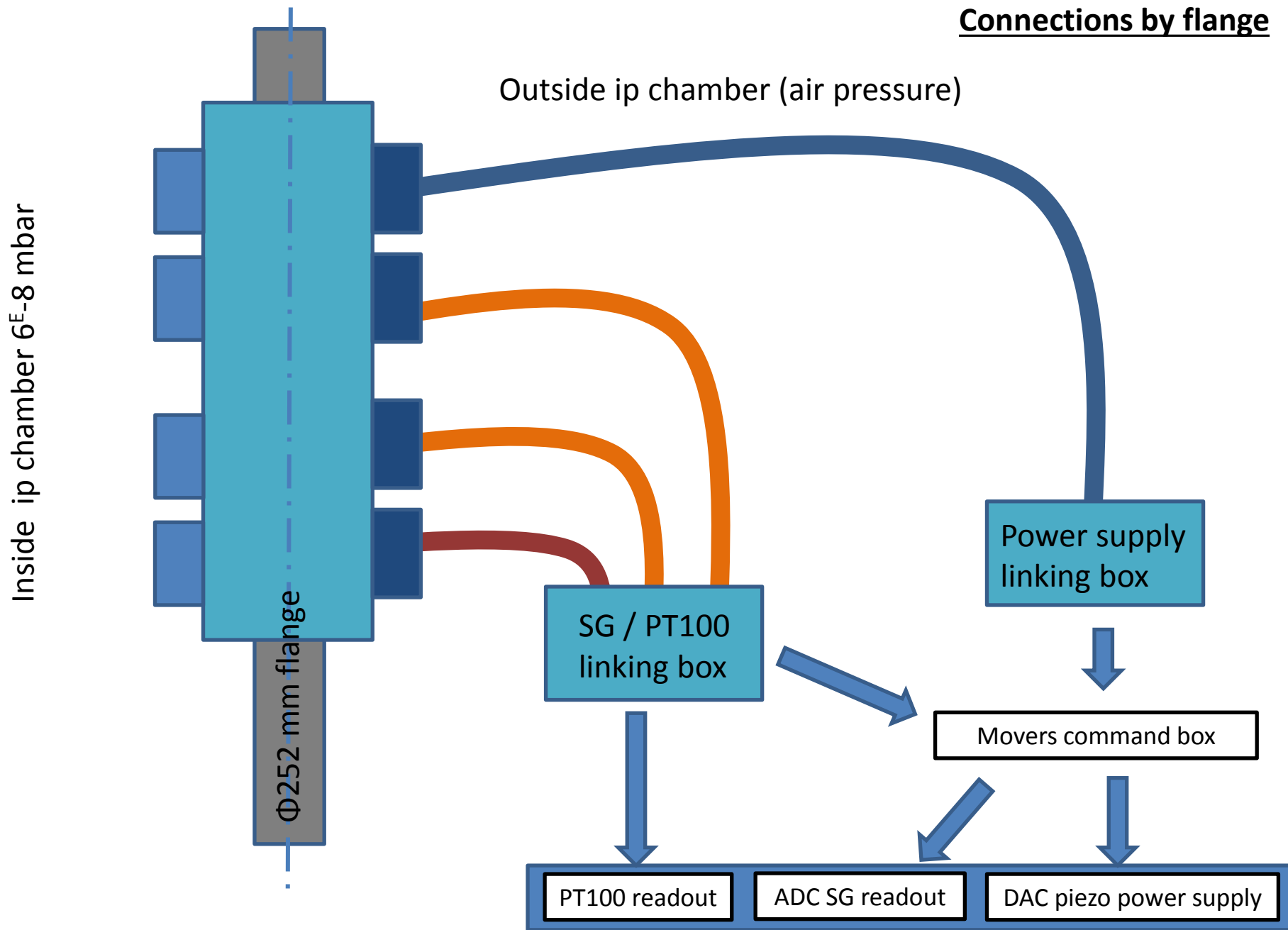
Without feedback

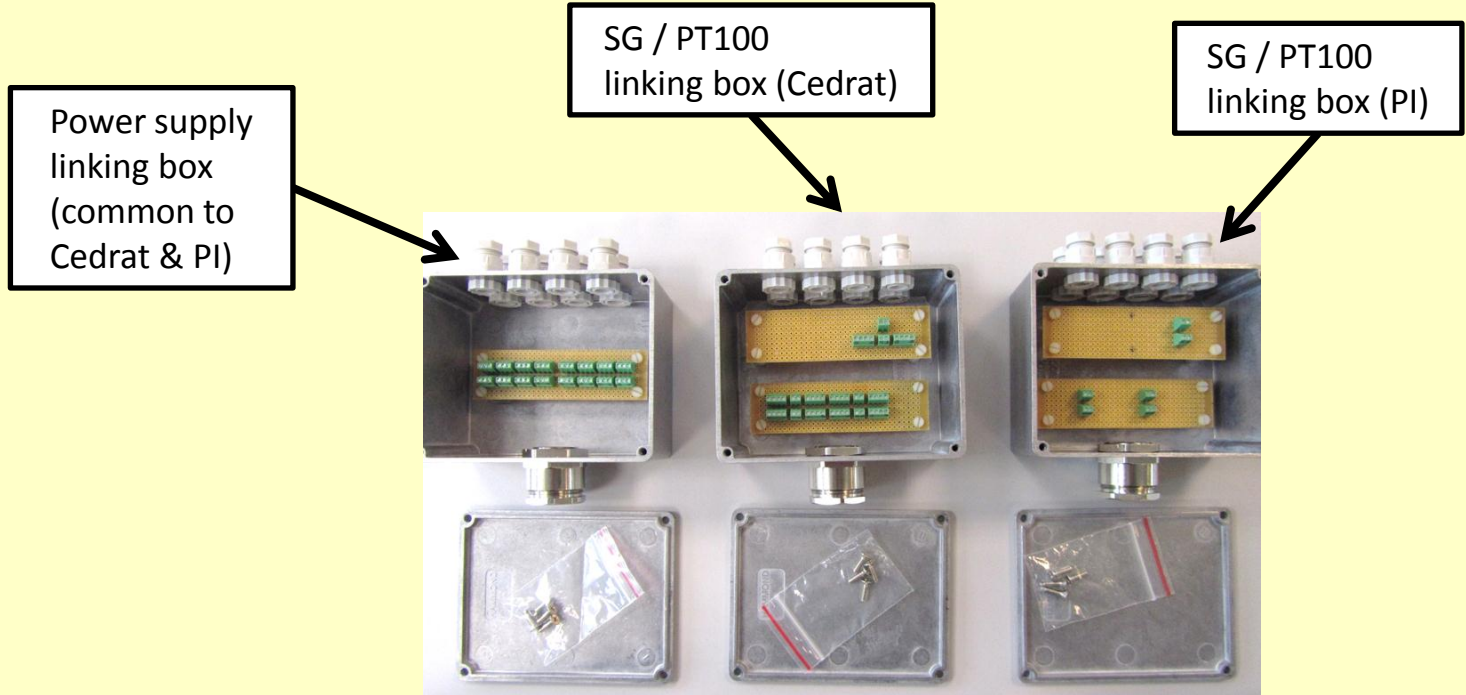




Electrical wiring







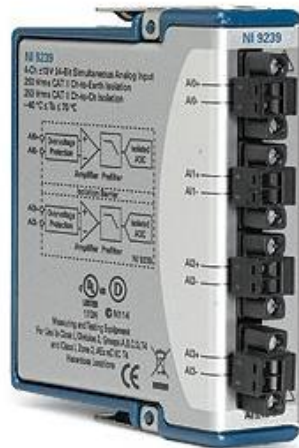
The ADC/DAC supplied by LAL for KEK control

Ethernet / RS432-485 / ...
link to connect with KEK
control room



Purchased.
Coming soon (2 weeks).

Output : DAC
piezo power supply
16 bits / +-10Vc (input x4)



x2

Input : ADC
strain gauges readout
24 bits / +-10V (input x4)



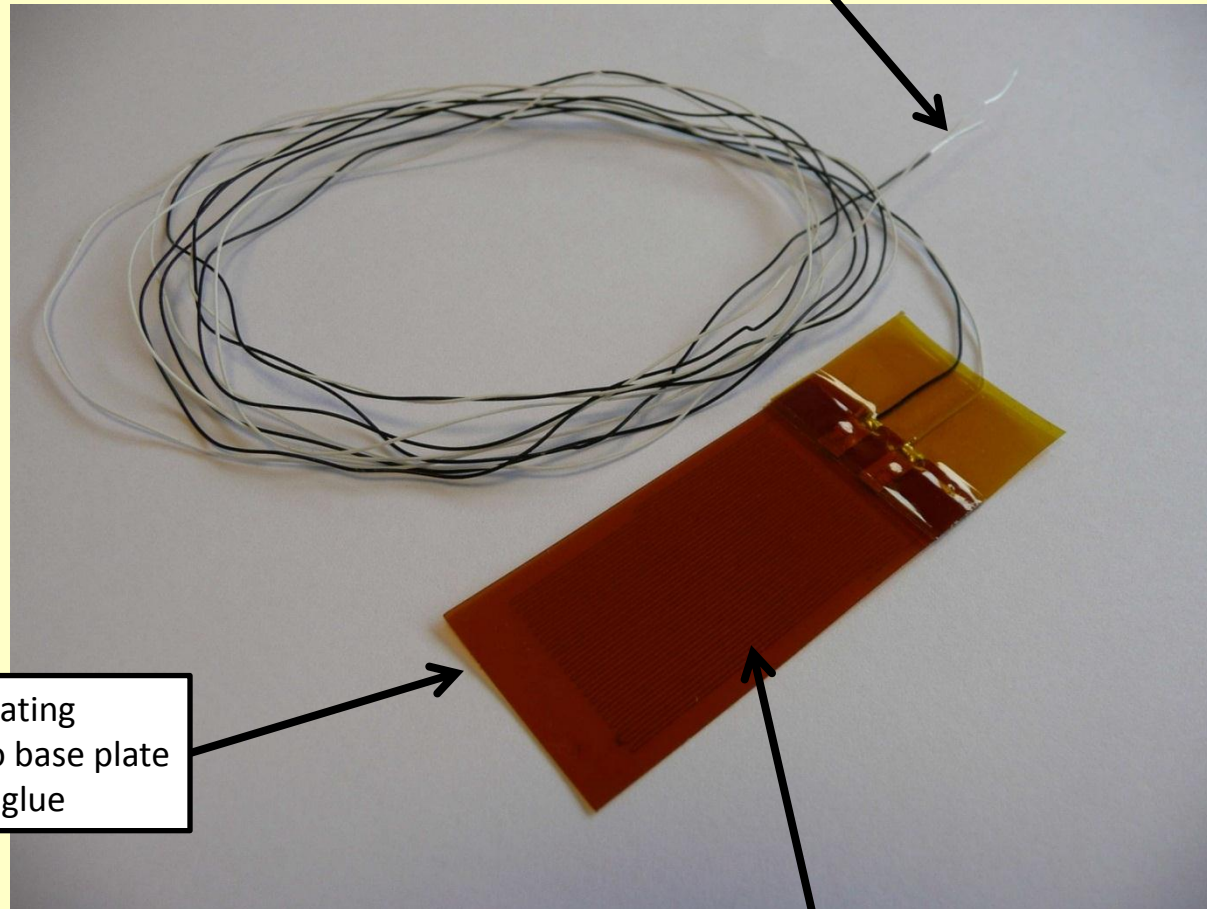
x2

Input : ADC
PT100 / PT1000 readout
24 bits (input x4)



x1

4 wires cables (PTFE housing)







Kapton coating
bonded to base plate
with UHV glue

PT100 / PT1000

2 temp probes (one for each flange)

Conclusion

Currently

# Week	7	8	9	10	11	12	13	14	15	16	17	18			
Cables	Order 	Delivery 	Link to electronics 							<div style="background-color: yellow; text-align: center; padding: 10px;">Tests cables + connectors + movers*</div> <div style="background-color: #90EE90; text-align: center; padding: 10px;">Preparation for shipment</div>					
UHV connectors	Order								Delivery 				Link to UHV connectors*		
Movers	Cleaning equipped base plate (movers / machined parts)														
Temp probes	Definition				Order			Delivery							

 Completed
 In progress

*In a clean room



Section 6.1 Multi-pin Subminiature-D

Feedthroughs – electrical and optical

Feedthroughs – electrical and optical

Section 6.1 Multi-pin Subminiature-D



Features

- Air-side connectors available
- Vacuum-side connectors available
- Kapton® insulated vacuum cables
- UHV compatible construction
- Conflat® compatible flanges
- ISO KF compatible flanges
- High-temperature rated to 250°C
- Custom versions on request

Specifications

Voltage¹ 300V DC maximum
Current 5A maximum at 20°C

Material

Shell Stainless steel
Pins Ni-Fe alloy gold-plated
Seal/insulation Glass-ceramic
Connector, air/vacuum² Delrin®/PEEK®

Vacuum range

UHV/HV 1×10^{-10} mbar / 1×10^{-8} mbar

Temperature range¹

Del-Seal™ mounted feedthrough -200°C to 250°C
ISO KF mounted feedthrough -20°C to 150°C
Air-side connector 55° to 80°C
Vacuum-side connector -200°C to 250°C

Dimensions

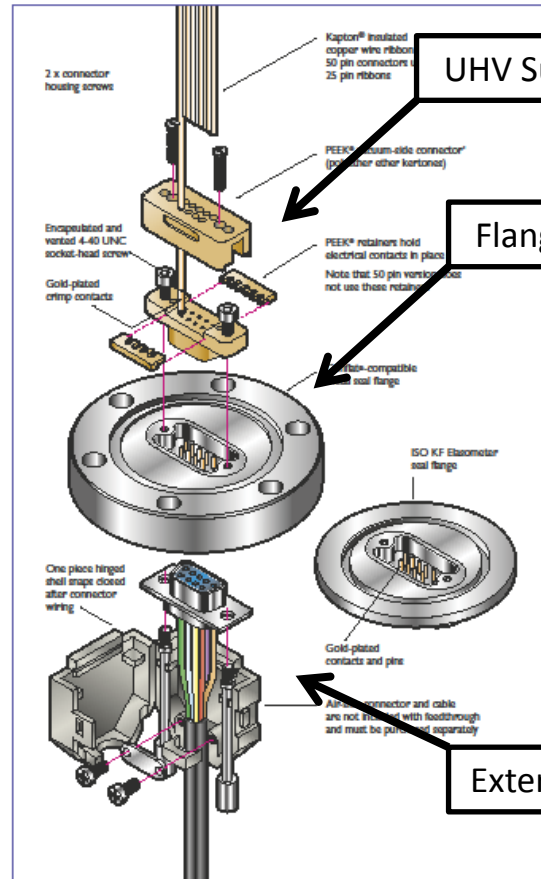
Reference only subject to change

¹ Electrical ratings are maximum test values
 Feedthroughs are intended for instrumentation applications carrying low level signal voltages and currents
² PEEK® is a Polyether ether ketone thermoplastic
³ Overall assembly ratings must be adjusted to that of the lowest rated component

Description

Hermetic subminiature-D feedthroughs are high density multi-pin instrumentation feedthroughs constructed with pin arrangements designed to meet MIL-C-24308 specifications. 9, 15, 25 or 50 gold-plated pins are hermetically sealed and

electrically insulated in a stainless steel shell using the latest in glass-ceramic bonding technology. High and ultrahigh vacuum cable assemblies with PEEK® connectors and Kapton® insulated ribbon cables are available to meet the rigorous demands of UHV environments.



UHV Sub D9 connector (LAL)

Flange (KEK)

External Sub D9 connector (LAL)

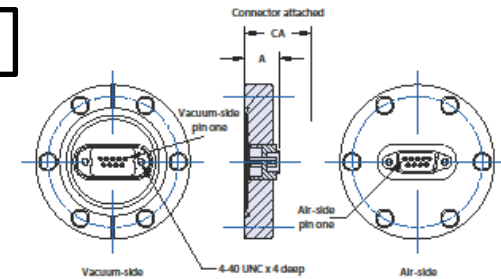
Vacuum side



UHV CF Flange with 9, 15 25 and 50 pins

No. of pins	Flange mount	A	CA	Reference	Part number	£	€
9	DN40CF	15	65	D9-C40	1511000	190	237
15	DN63CF	17	69	D15-C63	1511001	230	280
25	DN63CF	17	69	D25-C63	1511002	240	300
50	DN100CF	20	69	D50-C100	1511007	370	460

Caution! Air to vacuum pin positions are reversed because of straight-through pin design



Vacuum side



UHV ISO KF/LF Flange with 9, 15 25 and 50 pins

No. of pins	Flange mount	A	CA	Reference	Part number	£	€
9	DN40KF	15	64	D9-K40	1511020	190	230
15	DN50KF	15	64	D15-K50	1511021	230	270
25	DN63LF	15	64	D25-L63	1511022	260	320
50	DN100LF	15	64	D50-L100	1511008	370	500

Caution! Air to vacuum pin positions are reversed because of straight-through pin design

