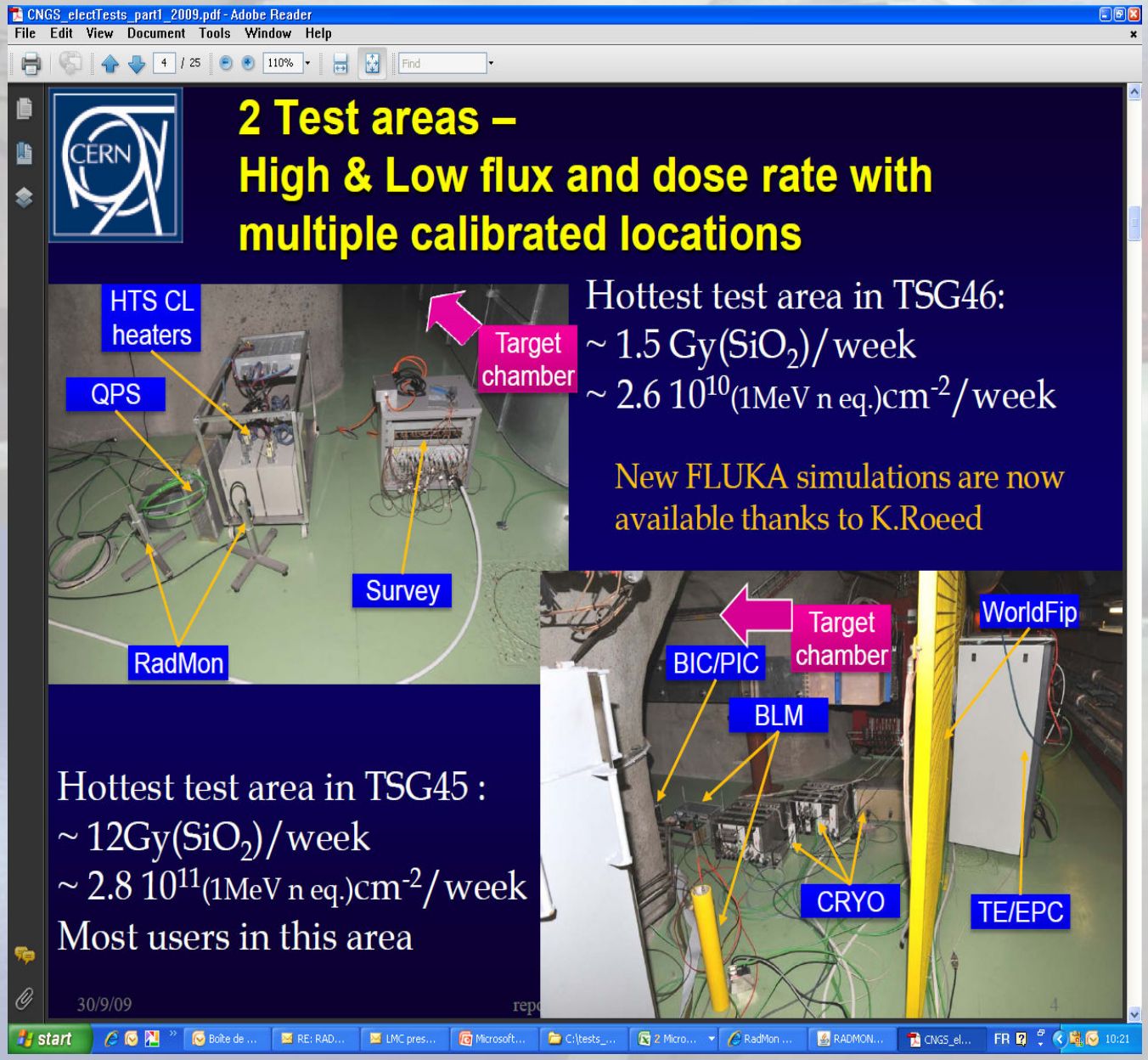
INTRODUCTION

- **SITUATION DANS LE TUNNEL**
- **LES POINTS TESTÉS**
  - **Courants consommés.**
  - **Tensions d'alimentations.**
  - **Conditionneurs.**
  - **Acquisitions par le FIP (LHC)**
- **DESCRIPTION DES TESTS**
- **RÉSULTATS**
- **QUESTIONS ?**

Mesures Analogiques

SITUATION

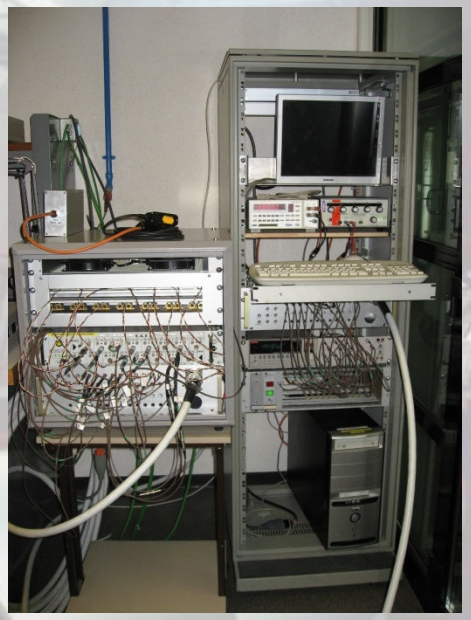


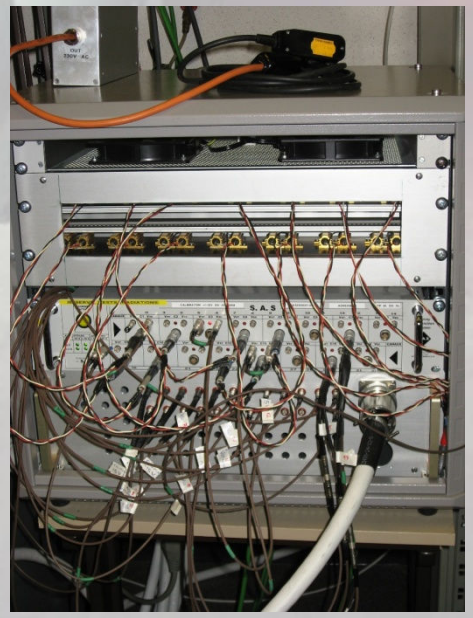
TSG46 :
17 sept au 7 oct

TSG45 :
7 oct au XX nov

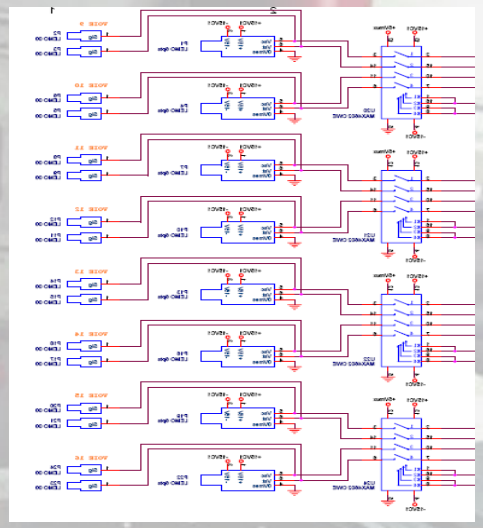
DESCRIPTION TESTS

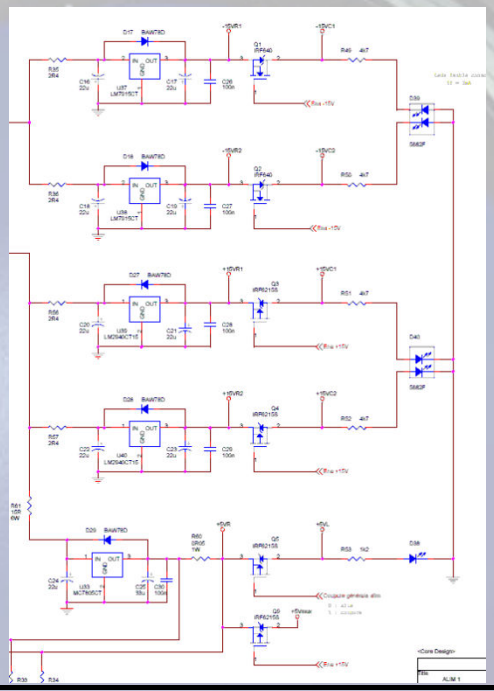
- CONSOMATION DES ALIMENTATIONS
- COMPORTEMENT DES CONDITIONNEURS
- SWITCHES MOS + MAXIM
- CARTE ADUC834 + FIP
  - SYNCHRONISATION
    - Programmes de logging et PC
  - CYCLES DE 5 MINUTES
    - 2 min de logging standard
    - 1 min de coupure alim.
    - 1 min pour 1er conditionneur
    - 1 min pour 2ème conditionneur
  - RESETS POSSIBLE
    - Général 230 V (relais).
    - Fip ➔ remote reset via un message ➔ 5V carte ADUC.
    - Watchdog Chip ADUC 834 ➔ 5V carte ADUC.
    - I 500mA du SAS ➔ 5V carte ADUC.

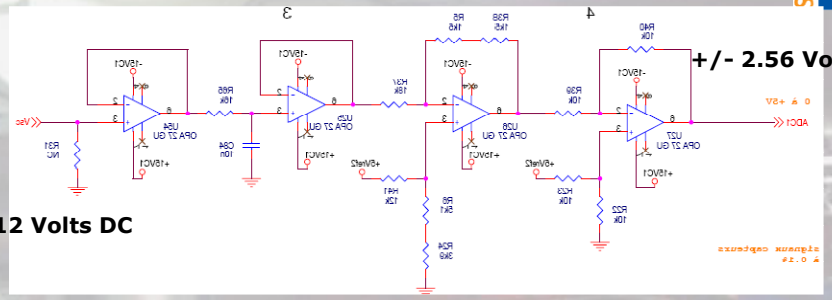


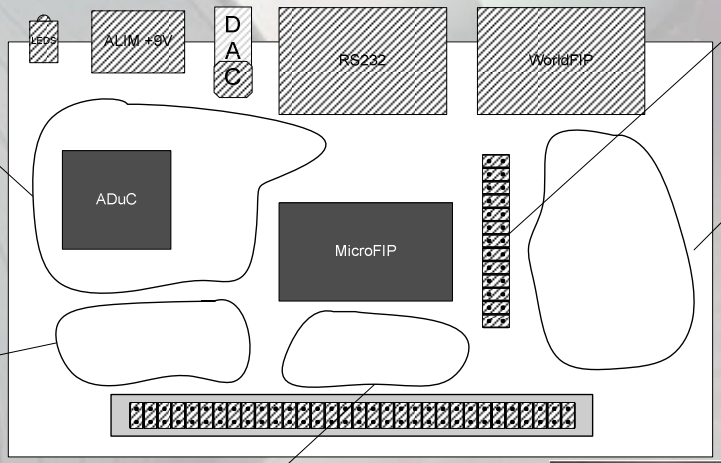


POINTS TESTÉS CHÂSSIS SAS



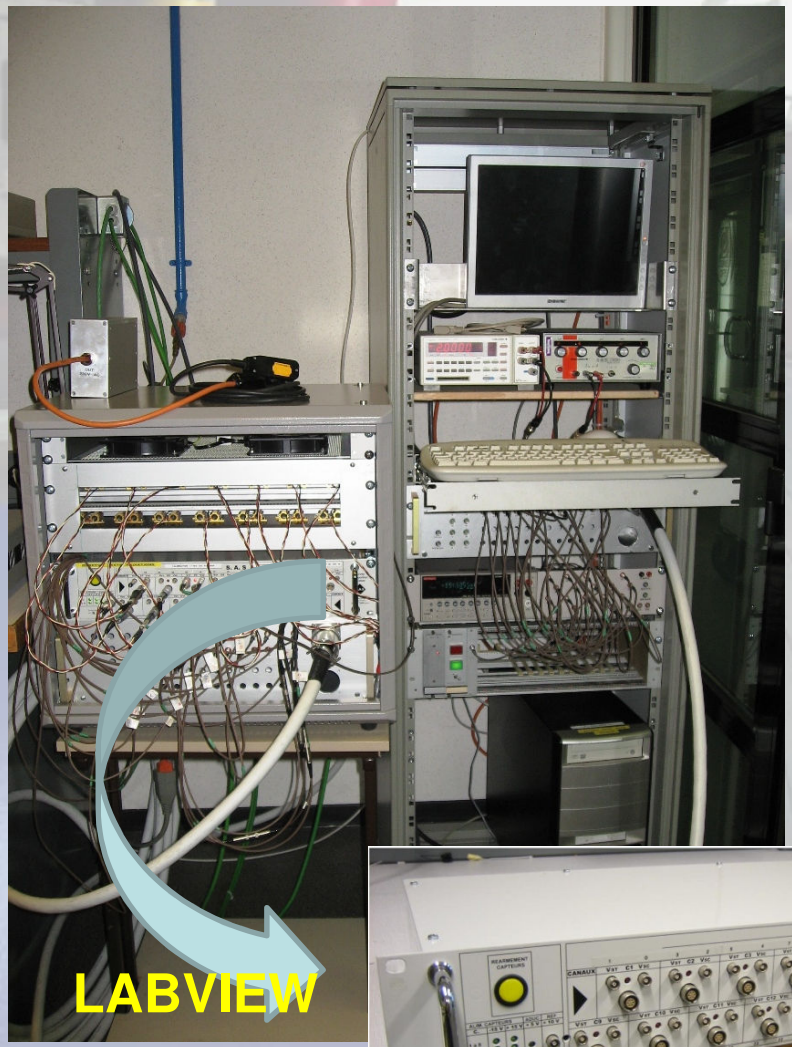






35 conv. of 20 bit in 1 sec.

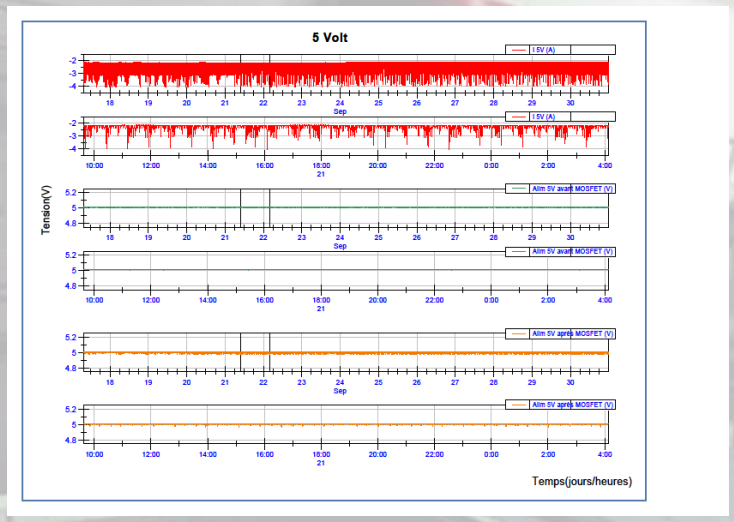
COMMENT

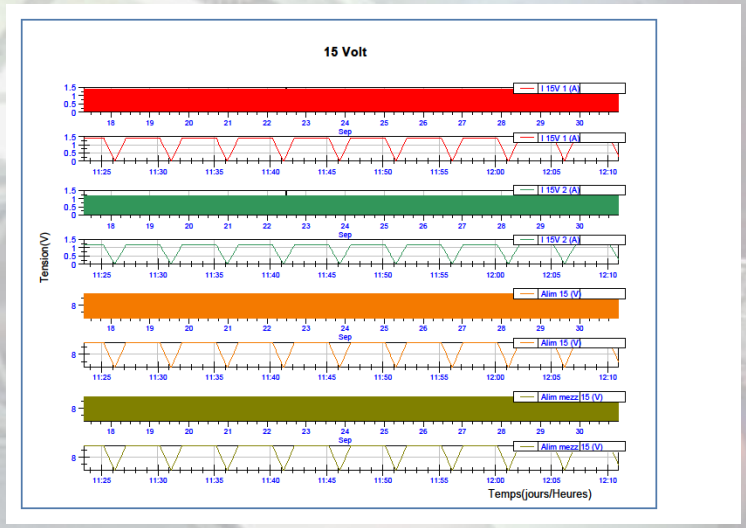


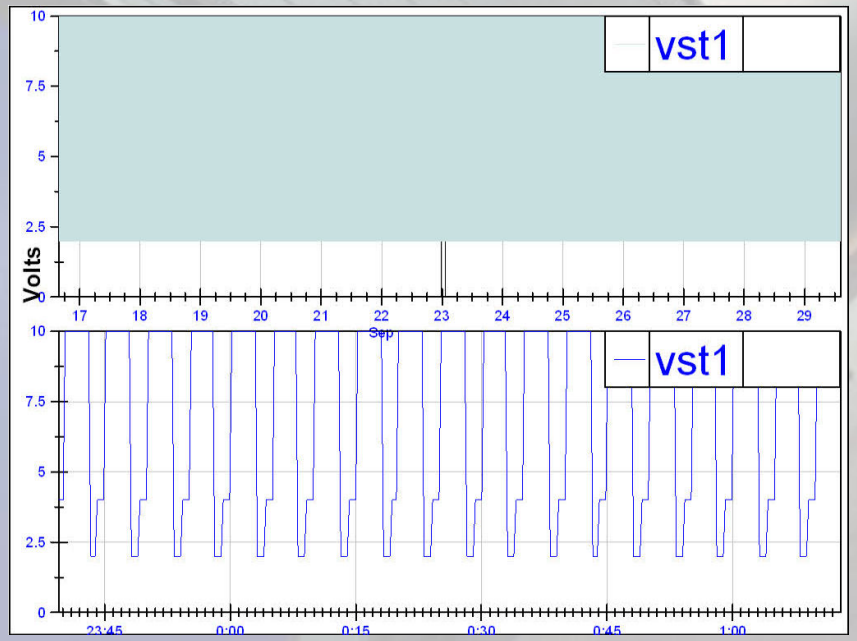
FIP LHC

J.Palluel
BE/CO

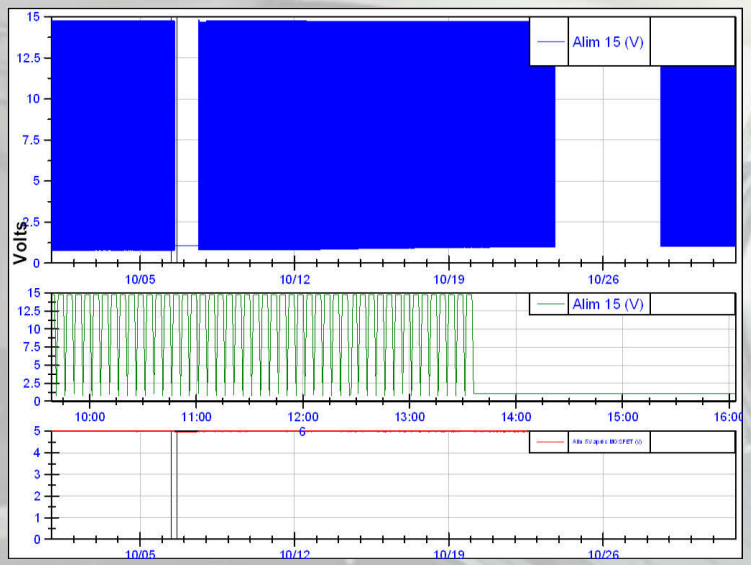
A.Marin
BE/ABP/SU

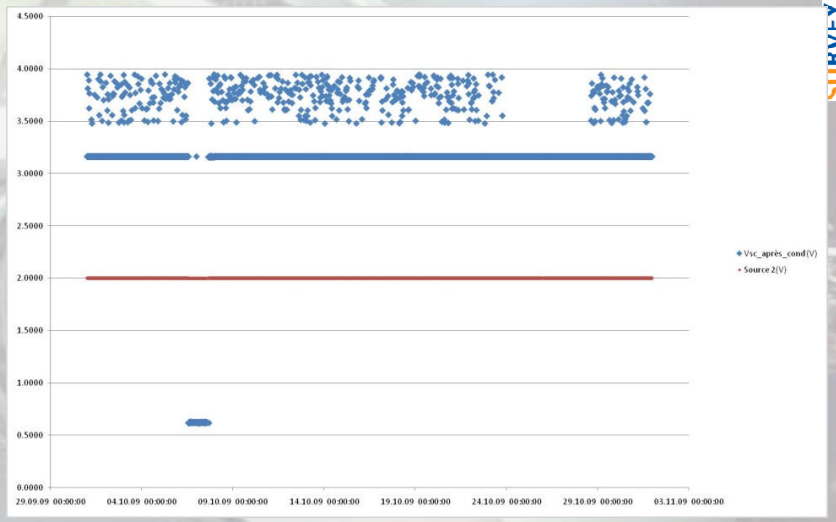

5 Volt
Tension(V)
Temps(jours/heures)

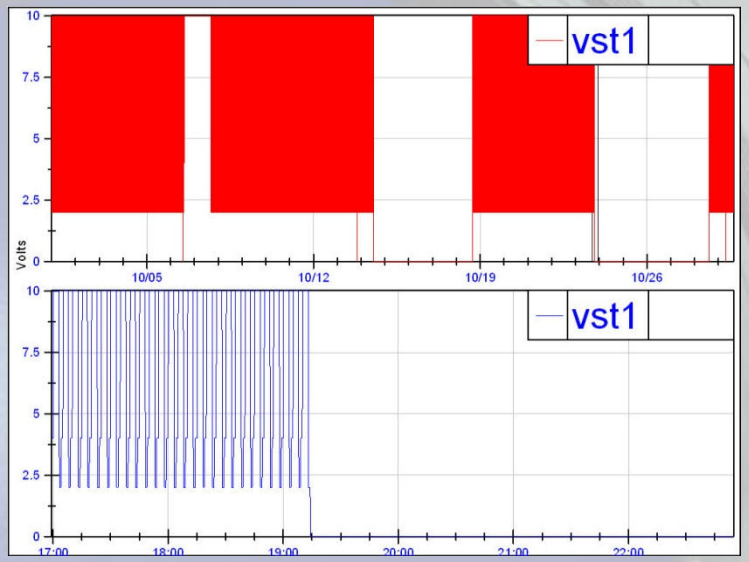

15 Volt
Tension(V)
Temps(jours/Heures)

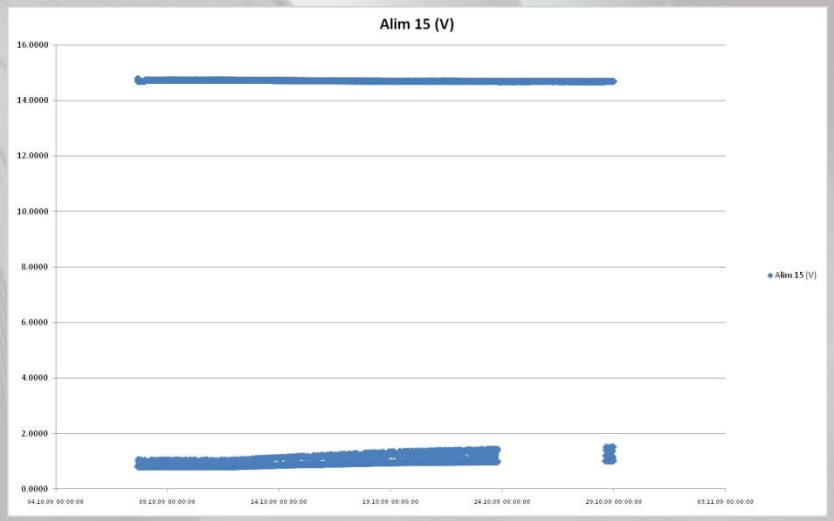

vst1
Volts
vst1

SEPTEMBRE



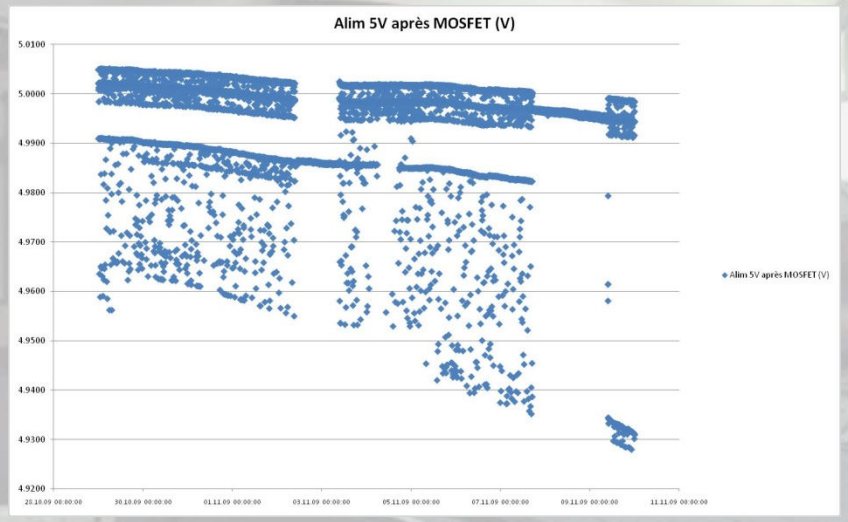


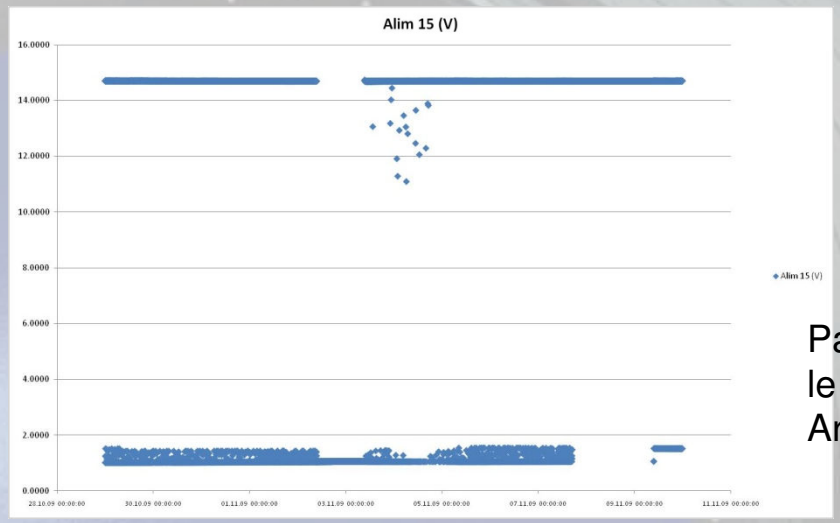




Changement de TJ45 à TJ46 le 7 octobre 2009.
Pannes FIP le 14 et le 23 avec redémarrage le 19 et le 28 avec un reset FIP à distance par BE/CO

OCTOBRE





Pannes FIP le 2, le 4, le 7 avec redémarrage le 3, le 5, le 9 avec un reset FIP à distance par BE/CO.
Arrêt total le 9 novembre

NOVEMBRE

COMPOSANTS CHÂSSIS SAS

Successfully tested COTS in TCC2 from 1999 to 2003
COMPOSANTS DU SAS

- Amplifiers
  - **INA105, INA141, OPA27**, AD210BN
- Comparators
  - **LM311**
- Timer
  - NE556
- Voltage regulators
  - **MC7815, MC7915**
- Voltage references
  - **REF102**, LT1236A-10
- Digital isolators
  - ISO150

- Thyristors
  - SKT80/18E
- Isolated DC-DC converters
  - THI0522, THI0511, TMA0505S, TMA0515D
- Micro-converters
  - ADuC812, ADuC831, **ADuC834**

- Switches
  - **MAX4602**
  - **IRF640, IRF 6215s**
- logique
  - **Série 74HCTxxx**

- ADuC812 (4000 devices in QPS electronics)
  - 8 channel 12 Bit ADC + 8051 compatible core + 8k Flash EEPROM
  - ➔ ADuC831 (2700 devices in QPS electronics)
  - As ADuC831 but 62k Flash EEPROM
- **ADuC834 (7600 devices in QPS electronics)**
  - **24 Bit ADC + 8051 compatible core + 62k Flash EEPROM**
- **Functional test of the chip**
  - **Communication during the test via serial port**
- Memory access tests
  - ADuC812: external SRAM
  - **ADuC831 & ADuC834: internal & external SRAM, internal Flash EEPROM**
- Error correction algorithm
  - Bitwise triple voting for data stored in external SRAM validated