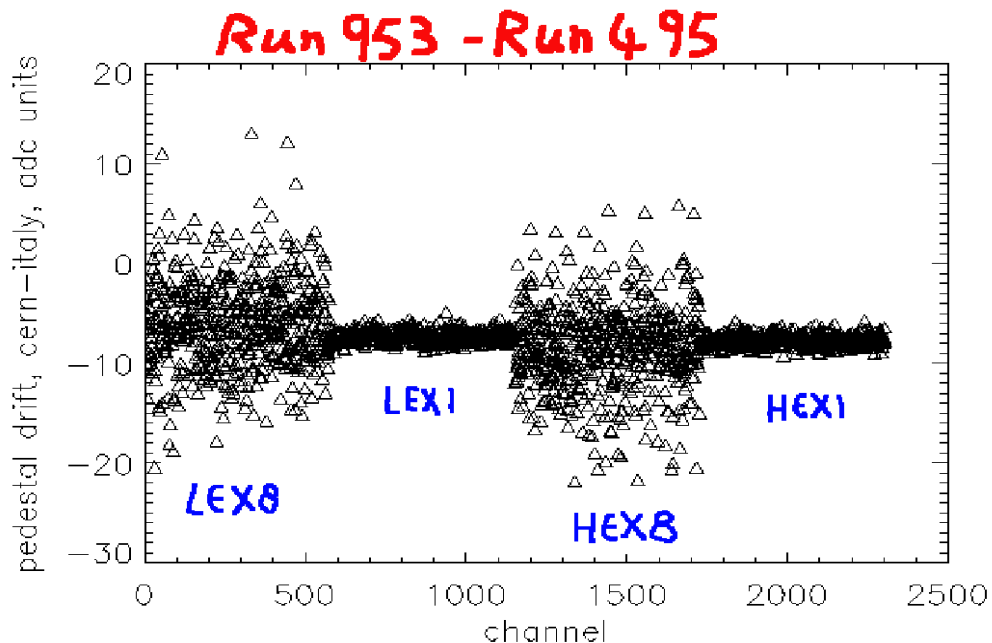


CU06 -CAL -Calibration

From the beginning...

- Calibration was first performed at Pisa with muons and Zach provided a set of « FLIGHT » files derived from those files

but we found that pedestals had significantly moved from Pisa to CERN



- A new pedestals run (700000953) was taken and analysed

- CAL/CU06 xml files are

(on noric: \$LATCalibRoot/CAL/CU06 aka
/afs/slac.stanford.edu/g/glast/ground/releases/calibrations/CAL/CU06/)

cidac2adc.digitization-latte-vlr030603p2_700000446_digi_DIGI.xml
muonAsym.digitization-latte-vlr030603p2_700000276_digi_DIGI.FLIGHT_GAIN.xml
muonMPD.digitization-latte-vlr030603p2_700000276_digi_DIGI.FLIGHT_GAIN.xml
muonPeds.digitization-latte-vlr030603p4_700000953_digi_DIGI.FLIGHT_GAIN.xml
tholdci.CU06.FLIGHT_GAIN.08022006.xml

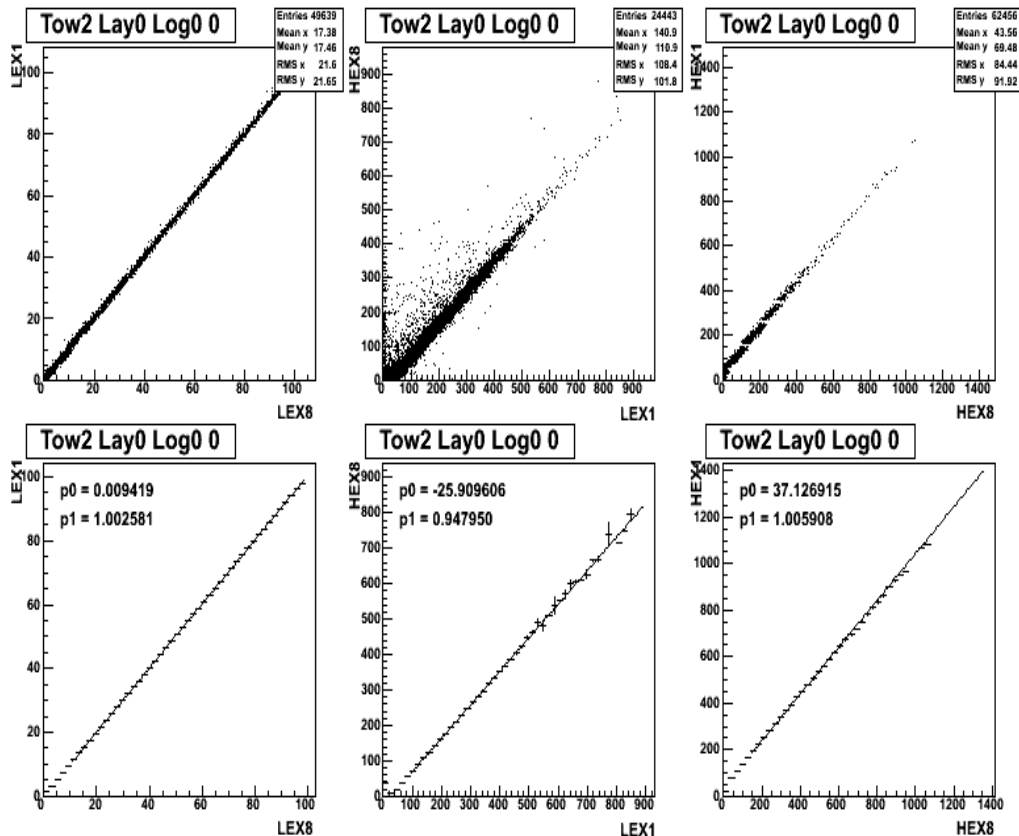
Intercalibration

- 51 runs (from 700000700 to 700000750) were taken by scanning tower 2 and 3 in X-Y positions.

(see <http://polywww.in2p3.fr/~bruel/btwww/summary.html> for description)

- with 5 GeV electrons, best range is LEX8 or LEX1, the CalTuple gives the information for HEX8, HEX1
- The procedure is
 - for each Xtal end, fit $LEX1=a*LEX8+b$, $HEX8=a1*LEX1+b1$ and $HEX1=a2*HEX8+b2$
 - results from the initial Zach's files can be found at http://polywww.in2p3.fr/~bruel/ccwww_v0/

For instance: twr 2 lyr 0 log 0 side POS



As we could expect only the ratio Large/Small diode needs to be corrected.

- Zach's calibGenCAL provides python scripts doing this.
- Asymmetry and MevPerDac files are changed.

Same procedure is applied after reprocessing locally the runs with the corrected DataBase.

Results at: http://polywww.in2p3.fr/~bruel/ccwww_v1/

Database is now:

```
cidac2adc.digitization-latte-vlr030603p2_700000446_digi_DIGI.xml
muonAsym.digitization-latte-vlr030603p2_700000276_digi_DIGI.FLIGHT_GAIN_correct_v2.xml
muonMPD.digitization-latte-vlr030603p2_700000276_digi_DIGI.FLIGHT_GAIN_correct_v2.xml
muonPeds.digitization-latte-vlr030603p4_700000953_digi_DIGI.FLIGHT_GAIN.xml
tholdci.CU06.FLIGHT_GAIN.08022006.xml
```

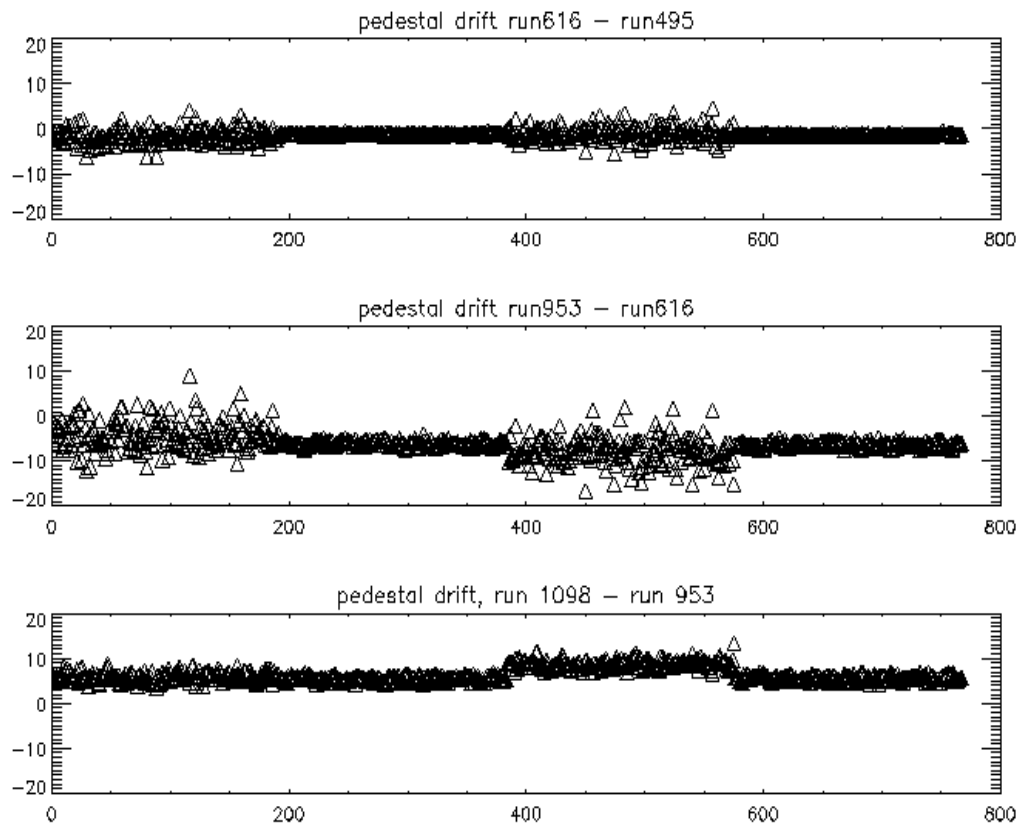
Finally

Intercalibration procedure is ready.

Will be checked at SPS, needs to be done for tower 1

BUT

Pedestal shift !!



The natural conclusion from this: « **we need regular measurements of pedestals**. I doesn't take too much time - **1000 events with externally triggered 4 range readout without zero suppression** would be enough. »