PRS Status and Plans

✓ Status:

    ✓ Reminder of maintenance work (July).
    ✓ Restart the first week of september.

✓ Plans:

HW fixes reminder:

1) New Patch Panel (PP) LV VFE have been produced and installed. All 100 channels OK.

2) Half or full VFE missing boards (5):

   Always the same picture: the clock/VFEReset contacts between the RJ45 and chips boards were not good (pulled by 0.5 to 1.5 mm) for dysfunctionning boards. All the problems are located in the top detector and the first and/or second board of a box. Recable them such that the RJ45 cables are pushing on the back of the board. All 100 channels OK.
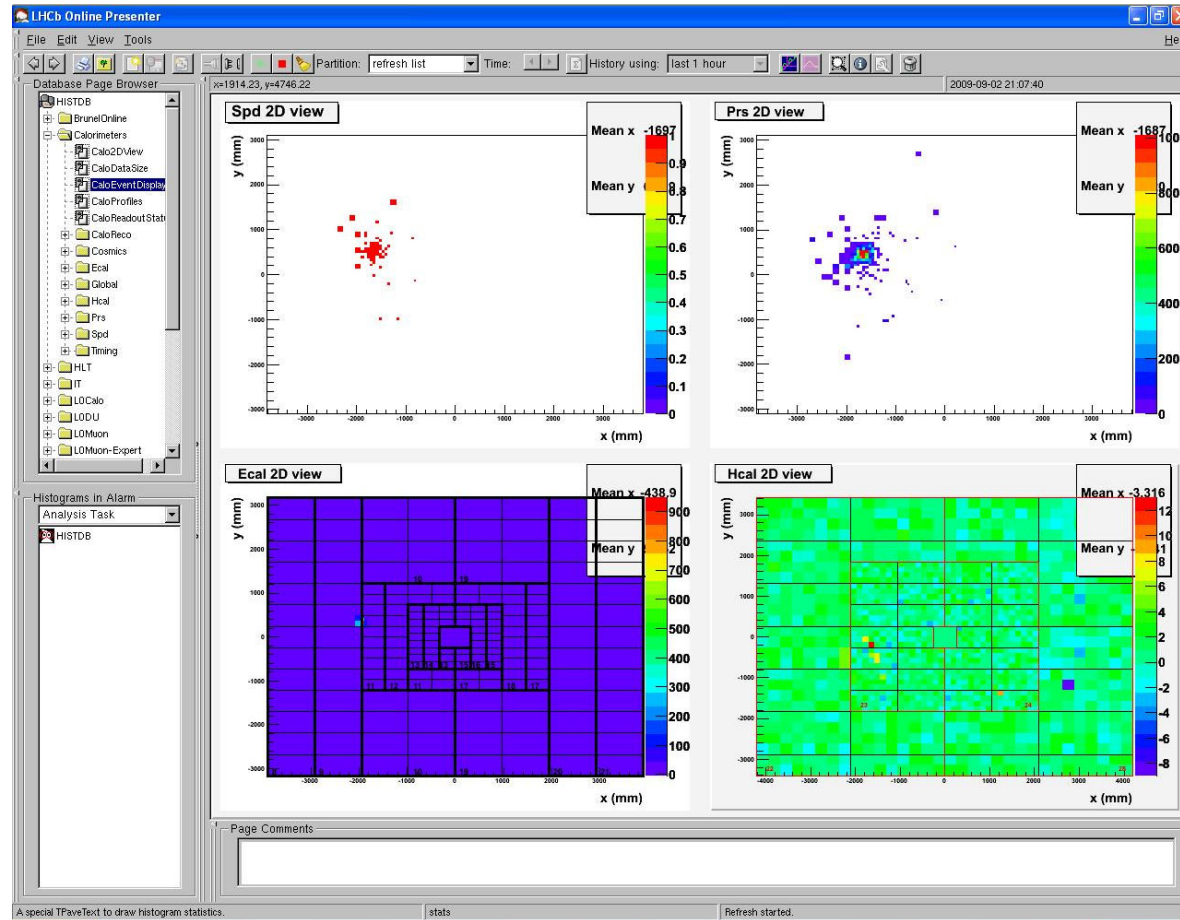
3) One HV channel in overcurrent (1.6). Might be a bad contact of the mu-metal. Now OK.

Last week:

Somehow a smooth restart after about 2 months stop. Some results:

1) PRS All channels are working OK. In addition, Crocs have been modified and replaced: OK.

2) Ran succesfully at 1MHz. VFEReset phasers of PS5FEB09 and PS5FEB17 have been moved by 2 ns. Seemed to cure the desynchronization observed in the previous 1MHz test. But still some desync. Observed. To be checked further.

3) LED data taken for A-side. In Olivier's and Sergey's hands for the automated analysis at the calibration farm.

4) Electron trigger run: / we recorded three events / during a quarter. Detectors were not aligned. Commissioned at 1 mHz.

Last week: electron trigger

Plans:

✓ DCS: the PSDCST1 project monitoring the VFE temperature is down. Currently out of the FSM DCS partition. Backup project PSDCST1_38 works. Thresholds to be defined: we could start by a universal threshold of 35° to trig the DCS shutdown of VFE power supply.

✓ Tell1 and trigger calibration signal. We want to send nzs-data to the calibration farm aimed at monitoring pedestal variations. Everything ready: to be commissioned.

✓ Electron (and photon) trigger: still missing a significant robustness test. No error seen so far but too few statistics [Means however that all the errors diagnosed in the past are fixed]. Think about using next TED run to get a further valuable check (modify TVB recipe).

✓ Standard XCAL cosmic events (1.5 M) are still needed for the pre-calibration of the PRS.