

# HCAL status and calibration

# HCAL status survey 07.09.2009

LEDTSB Delay Configuration    LED Sequence Configuration    LEDTSB Test with TDC    Time scan DAQ

**LEDTSB Delay Configuration**

**LEDTSB Settings**

Ch	DetectorRef	Delay	Coars	Fine	Offset	Status
46	Hm1_2	150	13	1	base	U
47	Hm4_2	152	13	3	base	0
48	Hm1_2	150	13	1	base	0
49	Hm5_1	153	13	4	base	0
50	Hm1_2	150	13	1	base	0
51	Hm5_2	151	13	2	base	0

**Operation Settings**

- ☒ Enable External Start
- ☒ Enable Int Generator
- ☐ Enable Increment Mode

A quick method to check the LEDs, PM/CWs and integrators :

- enable LEDTSB pulser (2 kHz continuous LED flashing)
- look at the PM currents

All the LEDs, PM/CWs and integrators OK

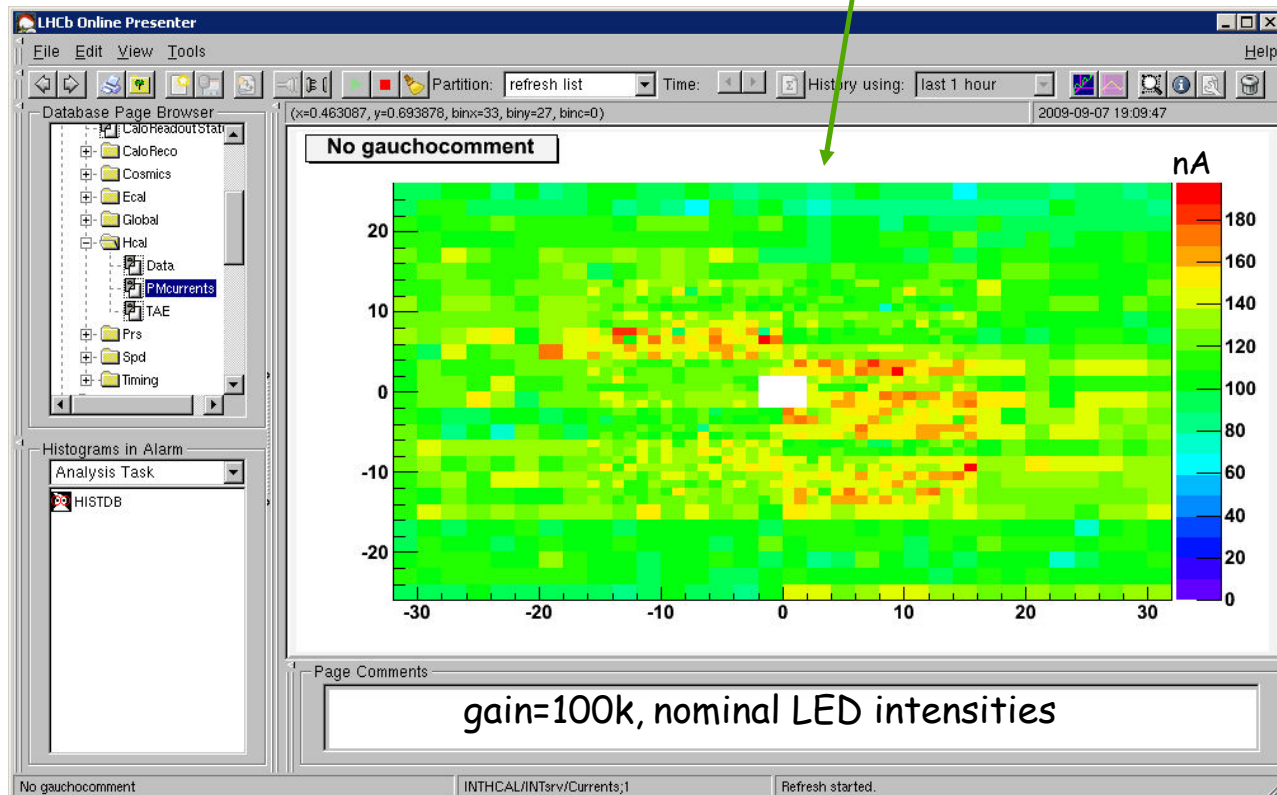
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The CAT reflection test:

✦ FEB side: ATI connector problem crate 23 slot 11 in 28 (I\_15\_02) (fixed)

✦ no problem found at the PM side

= HCAL low level HW is operational

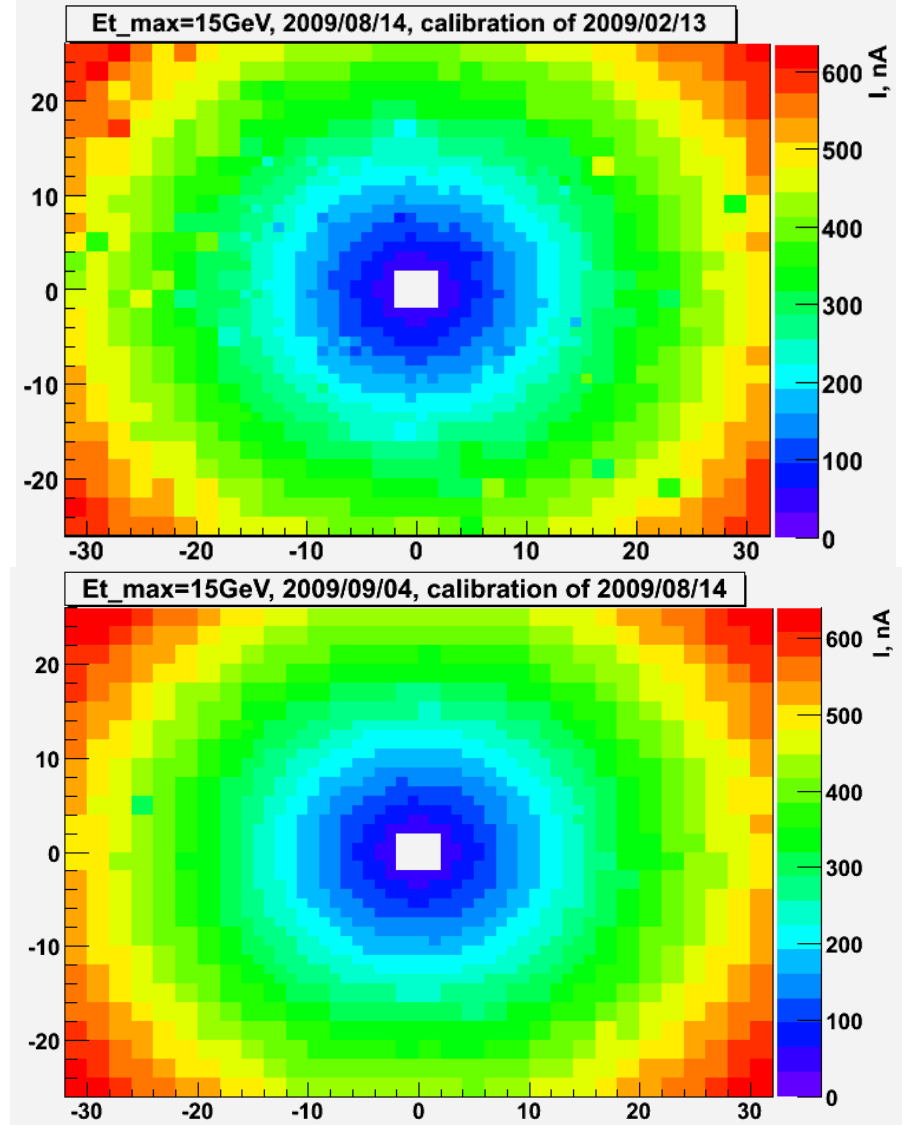


# HCAL $^{137}\text{Cs}$ calibration

Four  $^{137}\text{Cs}$  runs since June: 19 Jul, 07 Aug, 14 Aug, 04 Sep

Several source passages at different HVs in runs of 14 Aug and 04 Sep, in order to renew PM regulation curves

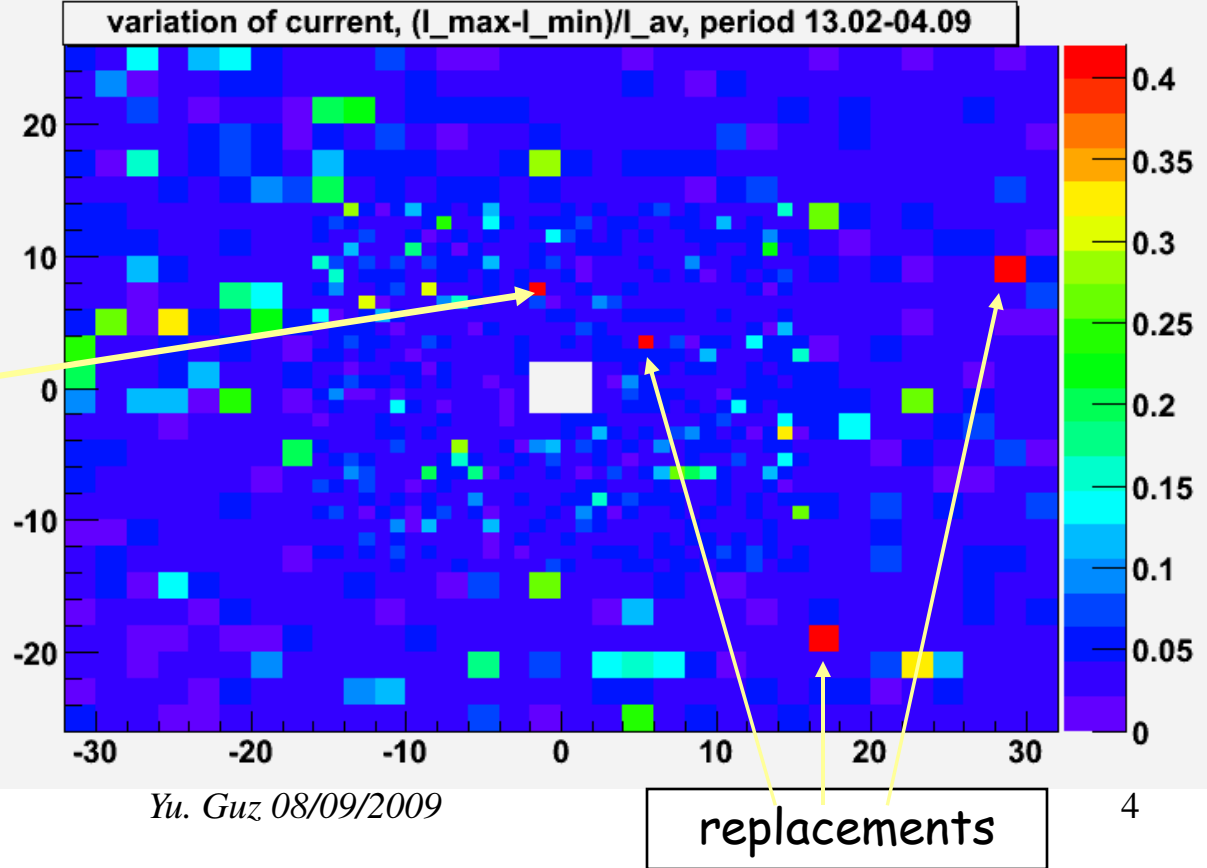
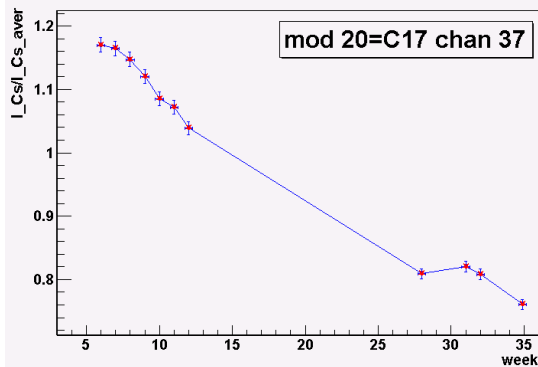
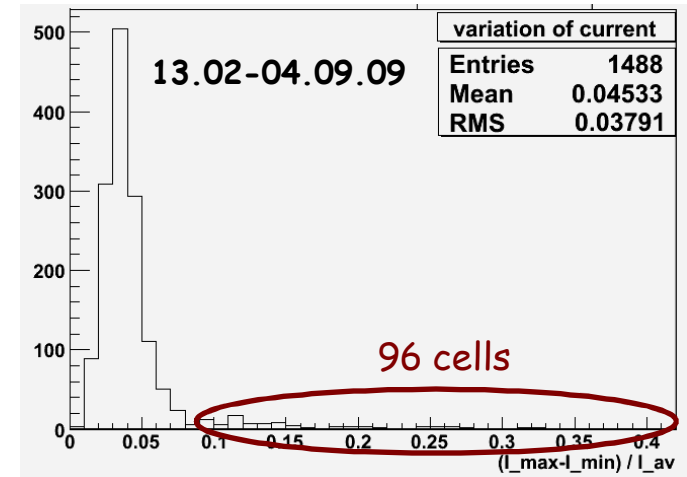
New calibration set (PHYSICS and STDB HVs and PM regulation curves) is ready, will be available in Db soon



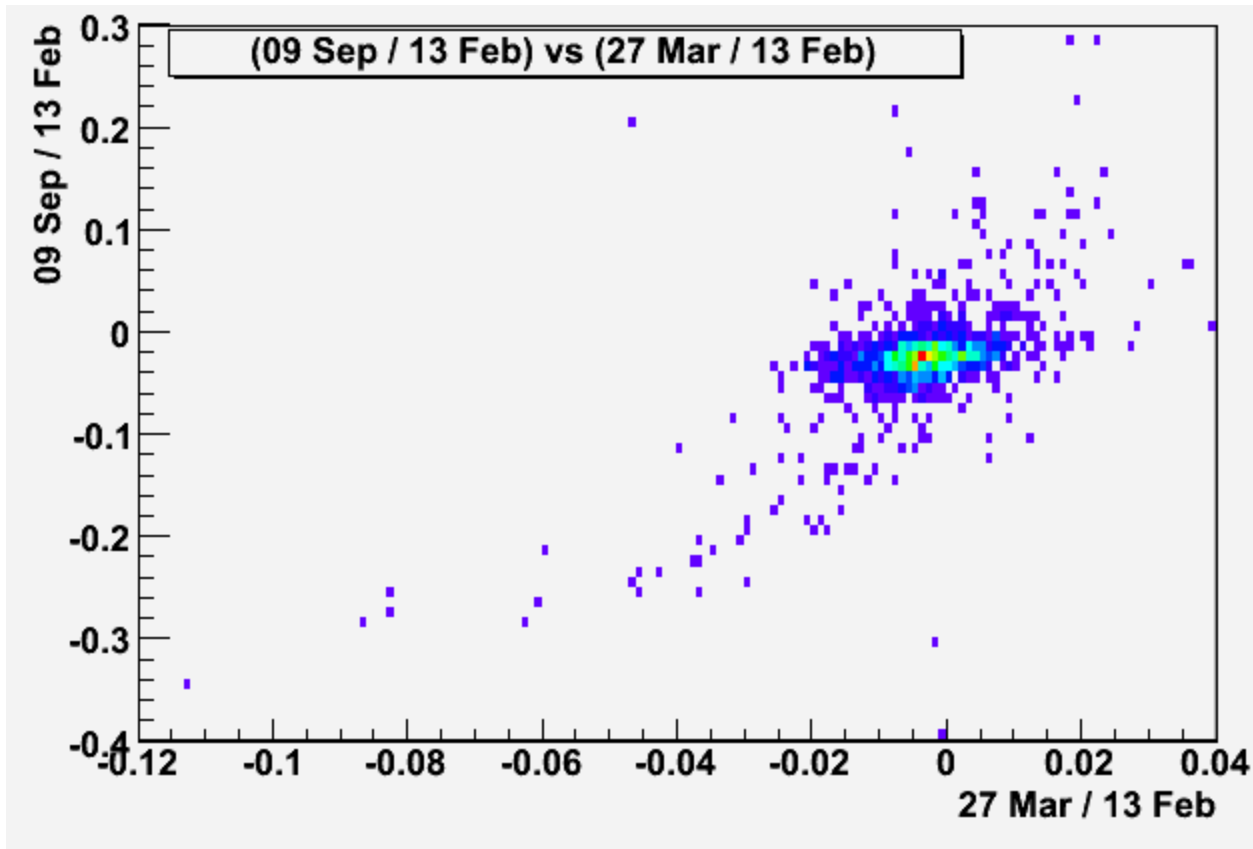
# PM stability, 13.02-04.09.09

Slow variation of PM gains: since 13.02, 96 PMs out of 1488 changed by (10...40)%

The PM gain drift is expected to continue →  $^{137}\text{Cs}$  calibration to be refreshed on needs



# Spare slides



**PM gain variations, 6 months vs 1.5 months**

# HCAL status

## PM replacements

4 PM/CWs were replaced since June'09.

NB one of the replaced bad CWs was the one detected from delay scans

