

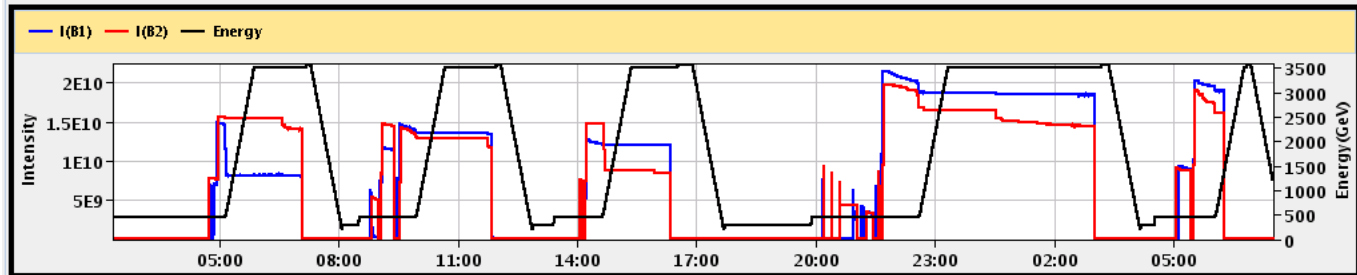
29-30/3/2010

30-Mar-2010 07:30:11 Fill #: 1003 Energy: 1213.4 GeV I(B1): 1.51e+08 I(B2): 7.08e+07

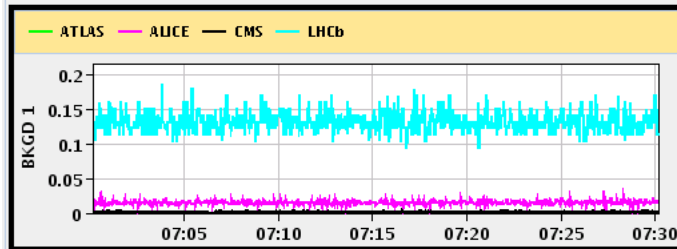
	ATLAS	ALICE	CMS	LHCb
Experiment Status	STANDBY	STANDBY	CALIBRATION	STANDBY
Instantaneous Luminosity	0.000e+00	0.000e+00	0.000e+00	-1.000e+00
BRAN Count Rate	6.544e-03	2.283e-03	1.385e-01	2.868e-01
BKGD 1	0.002	0.016	0.002	0.113
BKGD 2	0.000	0.000	0.000	0.002
BKGD 3	0.000	0.006	0.000	0.035

LHCf **STANDBY** Count(Hz): 0.000 LHCb VELO Position **OUT** Gap: 58.0 mm TOTEM: **STANDBY**

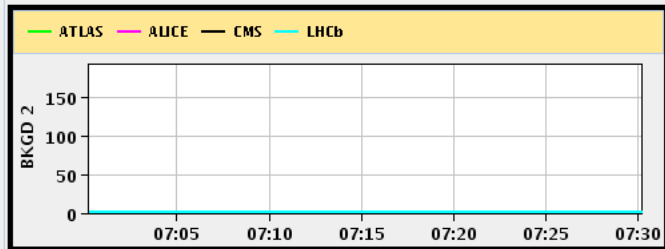
Performance over the last 12 Hrs



Background 1



Background 2



29/3/2010

- Ramp to 3.5 TeV
- Simulation of asynchronous beam dump

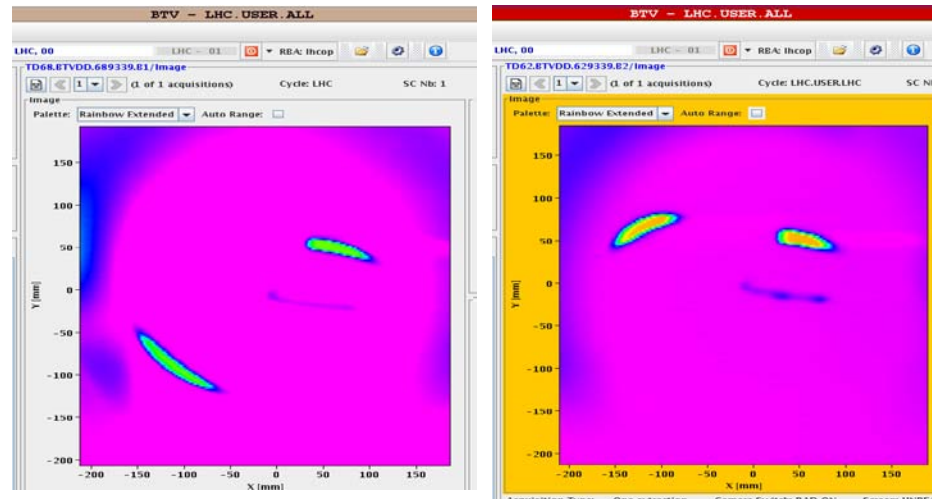
Switch off the RF - De-bunched beam

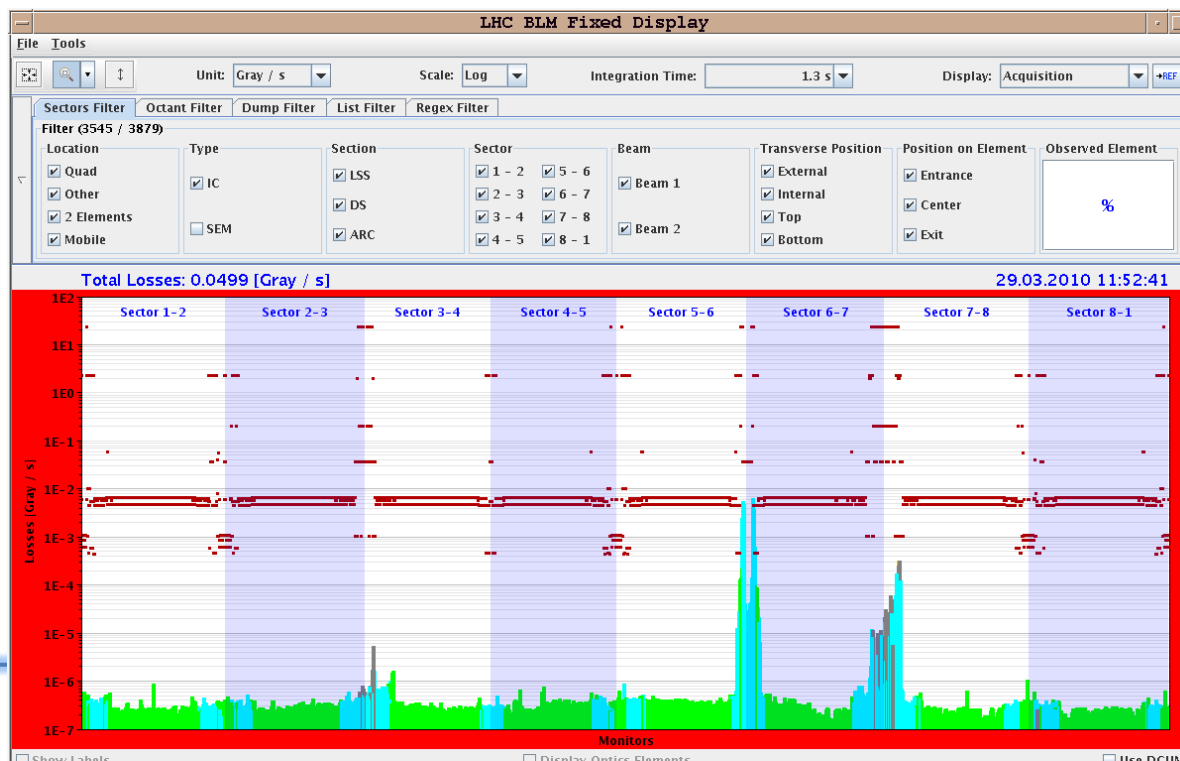
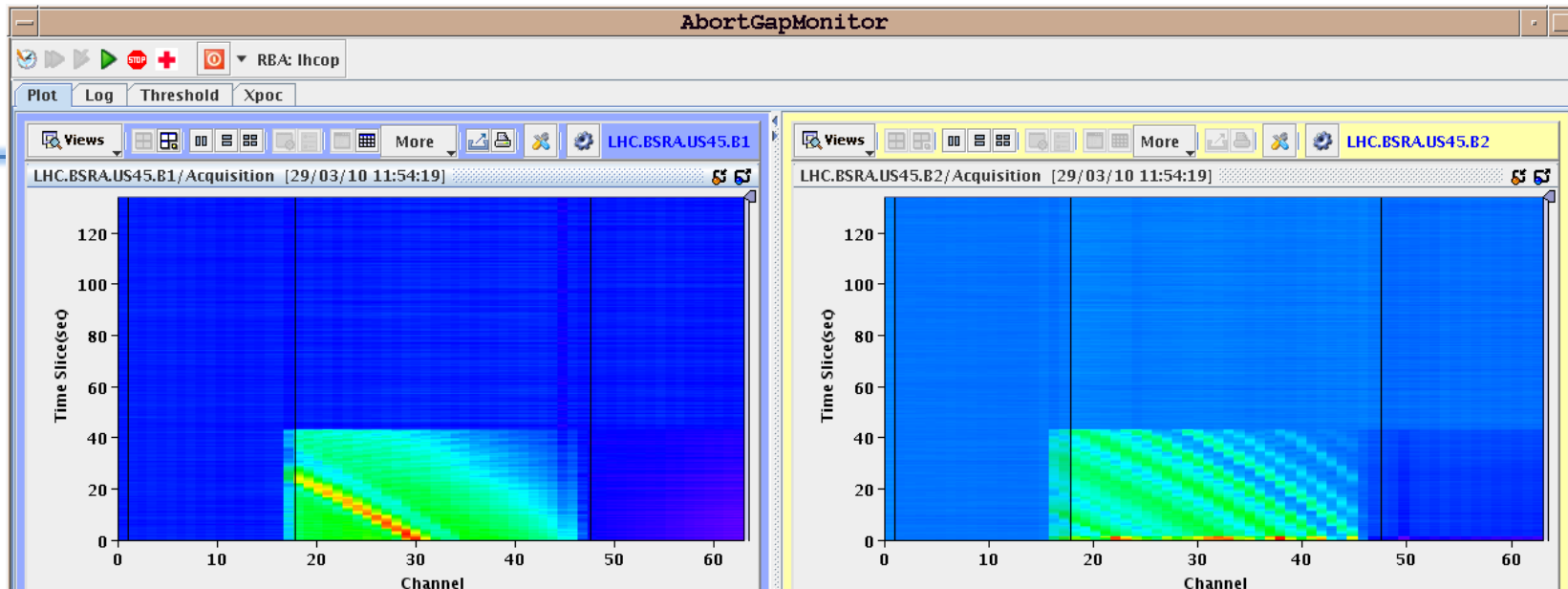
Beam dumped after about 2 minutes (peak of abort gap population).

Losses only on protection devices in P6, and collimators in P7 and P3.

Looks good - more detailed analysis of PM and experiment data to come

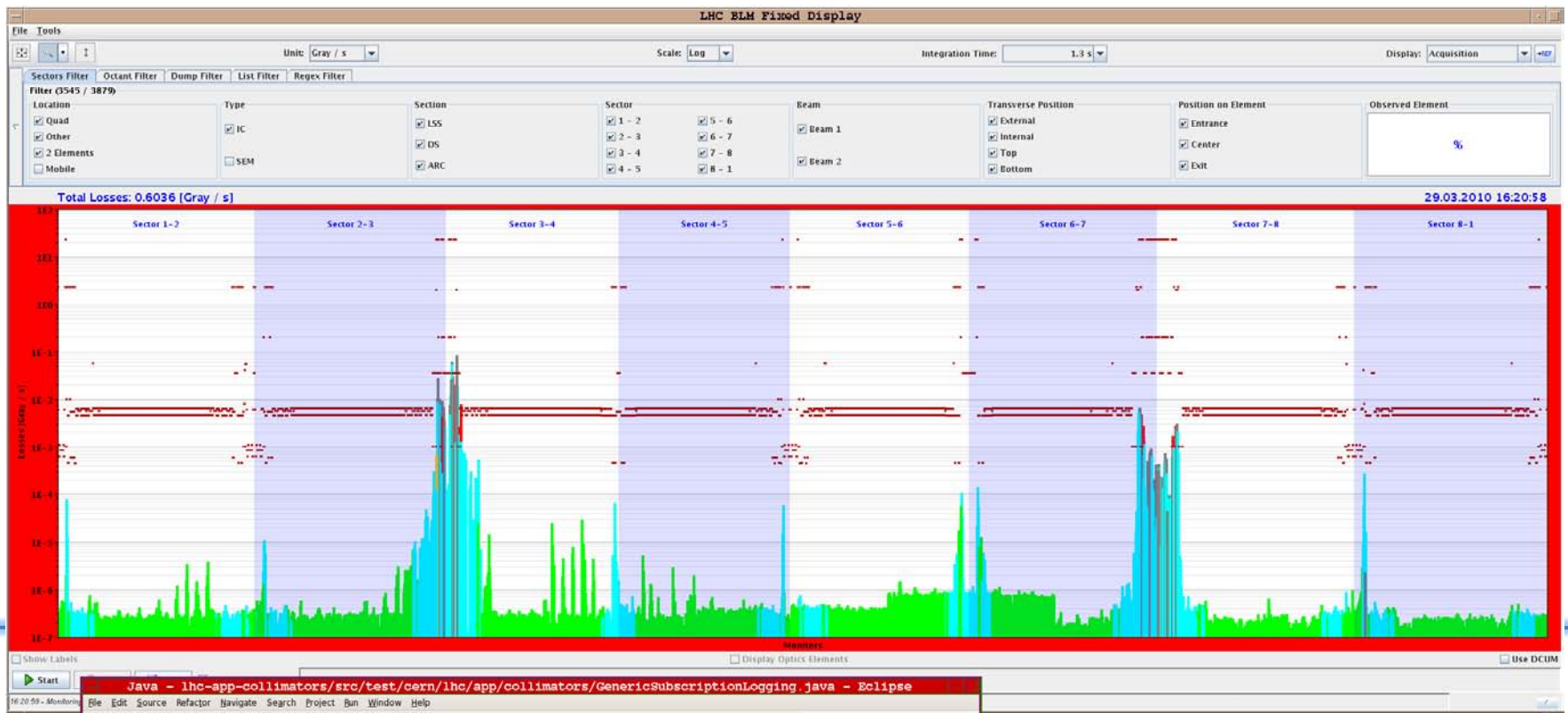
- No losses seen by the experiments





Monday 29/3/2010

- Afternoon (Ramp #2): Continue tests at 3.5 TeV
 - Tests stable beam flag on/off - Done (16:00 - 16:15)
 - Energy off set to verify containment of off-momentum losses in IR3 (16:20 - change RF by +600 Hz)





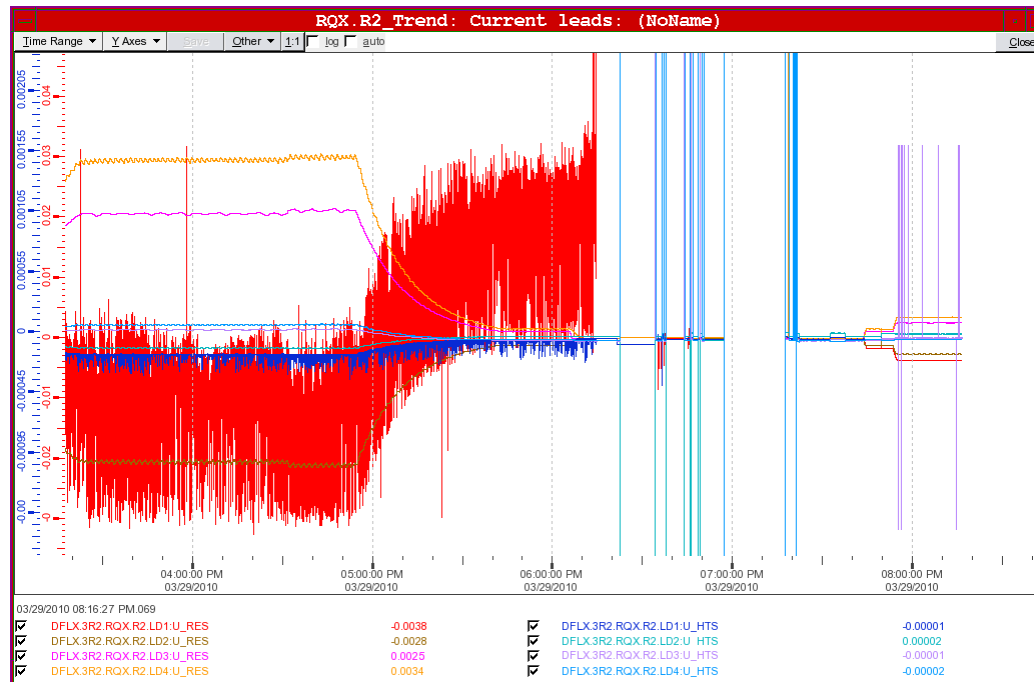
Monday 29/3/2010

- Some leakage seen in the experiments
 - Momentum collimation is safe for the machine. Safely below damage limit of tertiary collimators.

 - ALICE: no losses seen
 - ATLAS:
 - The biggest losses are in the ZDC (TAN), i.e. closest to the TCT
 - BCM would have fired an abort (at nominal settings); but the losses are much smaller than what was observed last Friday.
 - CMS:
 - There were losses: these were >100 times normal background rates. There was no unambiguous signal on the Beam Conditions monitor, so we can set an upper limit of the losses being $<1\%$ of the ABORT level.
 - LHCb: no losses seen
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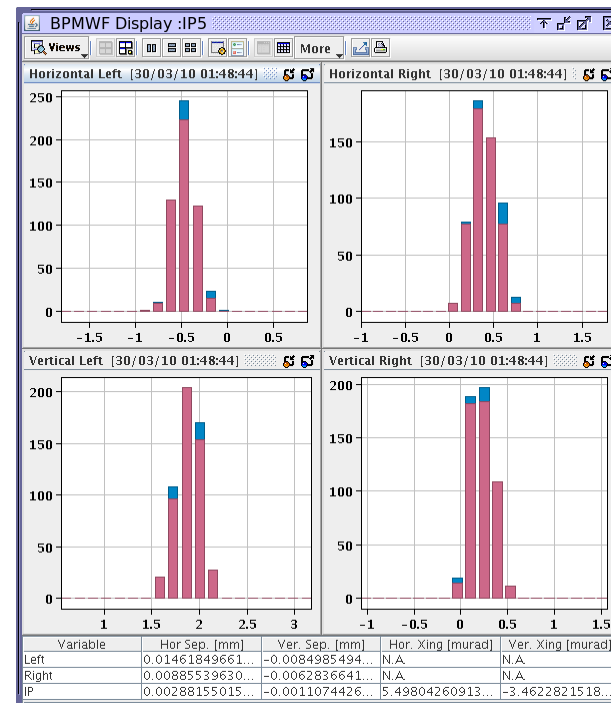
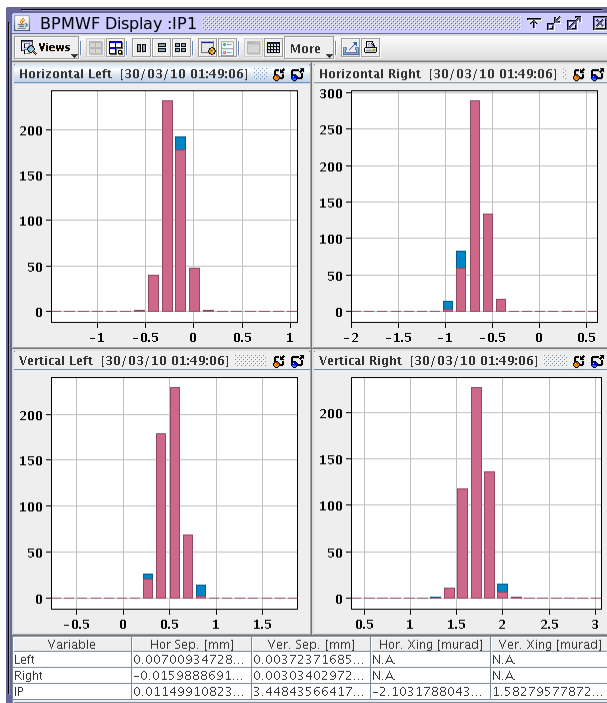
29/3/2010

- 18:00 - 20:00 : Access in UA27 to fix problem with voltage measurement on current lead for RQX.R2 - Bad connector found and repaired



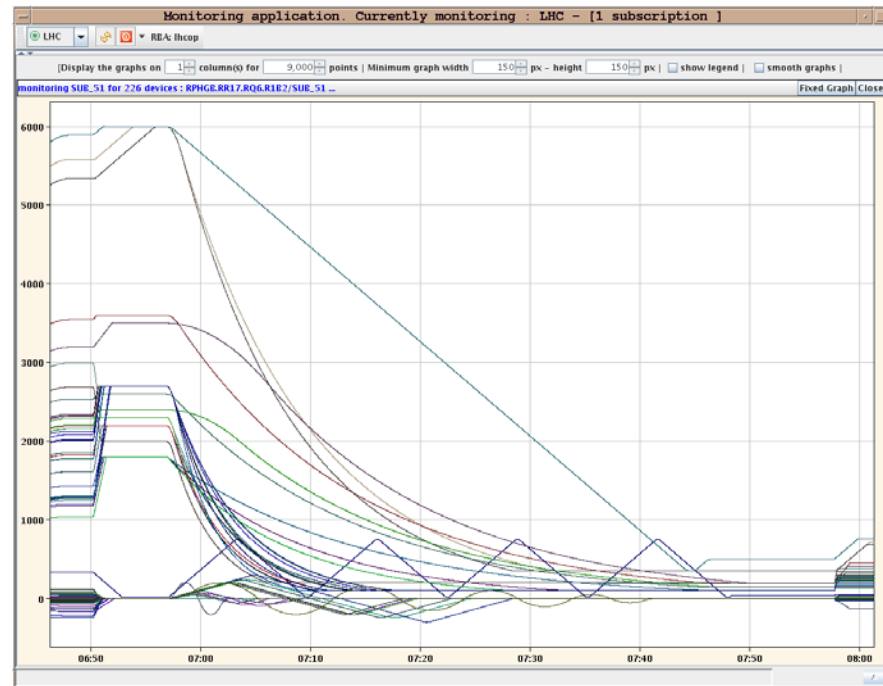
- 21:00 - 22:35 : Injection and beam adjustment
- 22:35 - 23:25 : Ramping at 3.5 TeV (Ramp #3)- Non colliding buckets **B1 (1, 17851), B2 (1001, 9911) - 9e9 per bunch - Everything unmasked**

- 01:10 **STABLE BEAMS**: non-colliding pattern
- 01:10 - 03:00 : Beam left at 3.5 TeV
- get feedbacks from experiments from beam gas:
 - LHCb IP8: B1 is lower than B2 by 280 μm : trimmed V +140 μm B1 and -140 μm B2
 - CMS: V is $\sim 100\mu\text{m}$ offset (B2 is lower than B1) but difference is at the 1 sigma level



30/3/2010

- ~05:00: start filling - **B1 (1, 17851), B2 (1, 8911)**
- 06:02 started ramp
- 06:17 RQT12.R4B1 tripped (power converter) - beams lost
- Pre-cycled



- Injection started at 08:00
- Ramp starting

30/3/2010

...Ready for Collision
