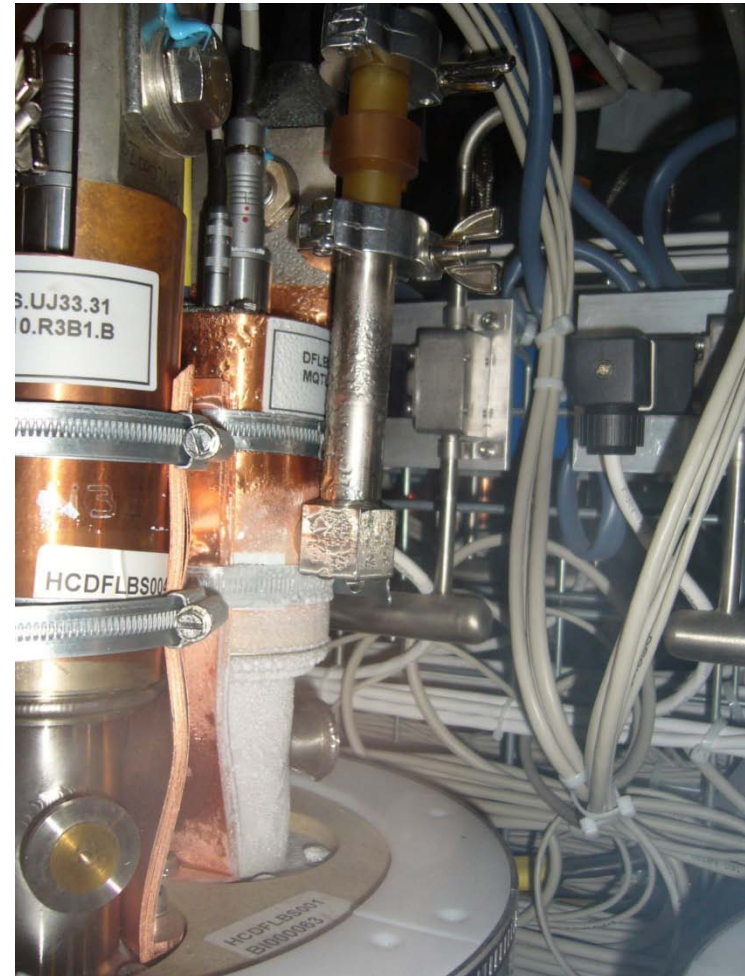


Saturday 20/3/2010

- Current lead of RQTL9.R3B1 is wet and frozen due to wrong regulation of the cryo-valve. OK from A. Siemko to continue operation given the low current ($<14 \text{ A @ } 3.5\text{TeV}$) \rightarrow no pre-cycle and limitation to 20 A.





Saturday 20/3/2010

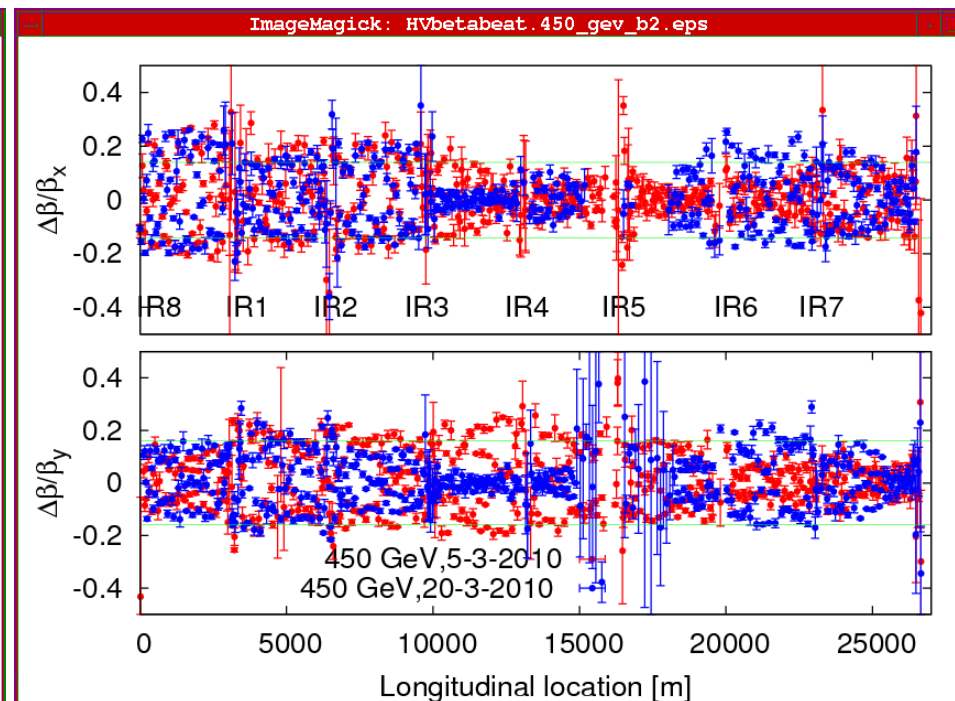
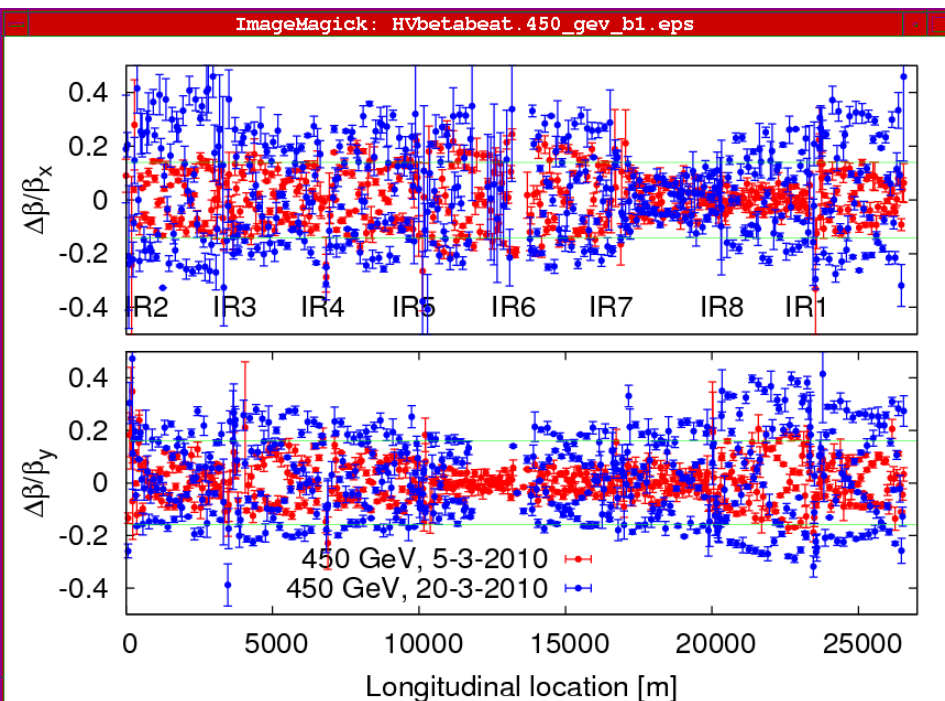
- Protection in case of dump with 14 out of 15 kickers:
 - Verification of the knob to simulate this situation is required
 - Setting-up of TI2 collimators completed (TI8 was already done)
 - Calibration of the LSS6 interlocked BPMs only started (to be continued)
-

Saturday 20/3/2010

- β -beating measurement @ 450 GeV. Change observed on beam 1 as compared to 5/3.

Beam 1

Beam 2

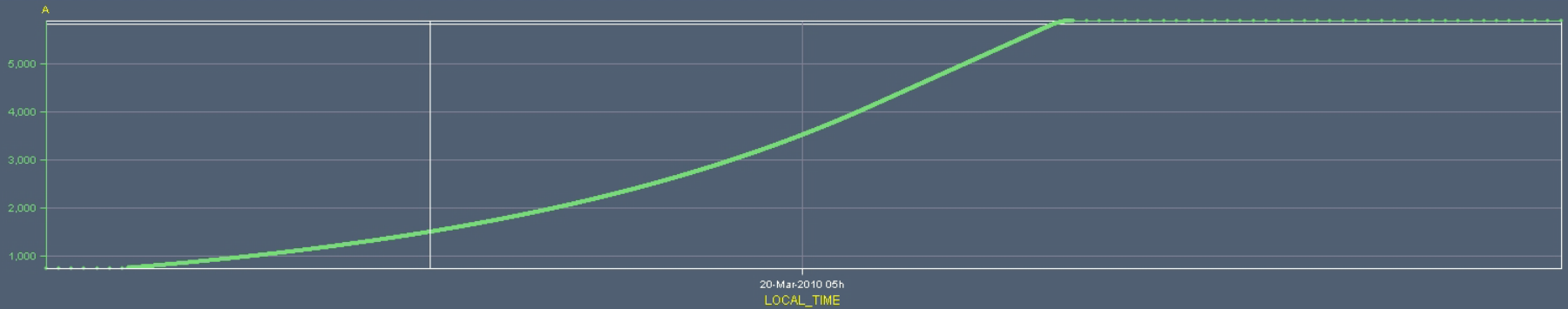


Saturday 20/3/2010

- Another ramp to 3.5 TeV but with reduced ramp time (parabolic-linear-parabolic instead of parabolic-exponential-linear-parabolic) reduction by 27 min

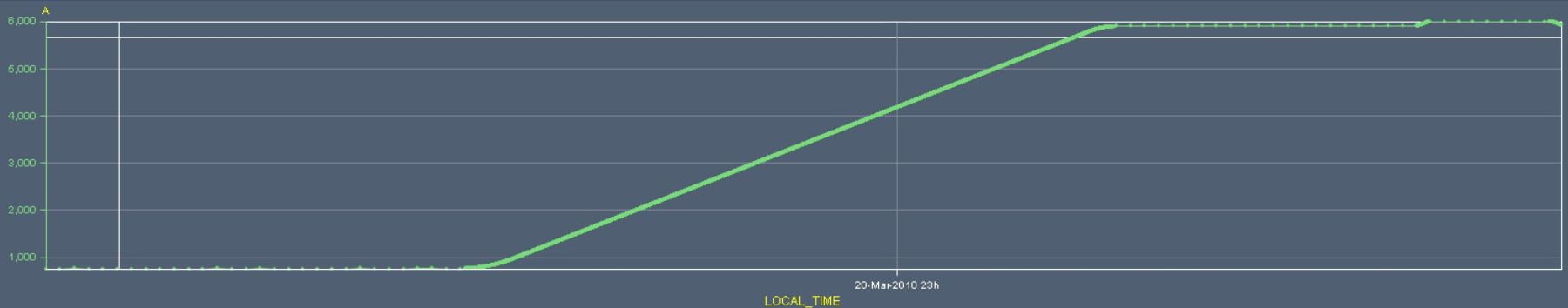
Timeseries Chart between 2010-03-20 04:00:00 and 2010-03-20 06:00:00 (LOCAL_TIME)

→ RPTE_UA23_RB_A12_I_MEAS



Timeseries Chart between 2010-03-20 22:00:00 and 2010-03-20 23:59:00 (LOCAL_TIME)

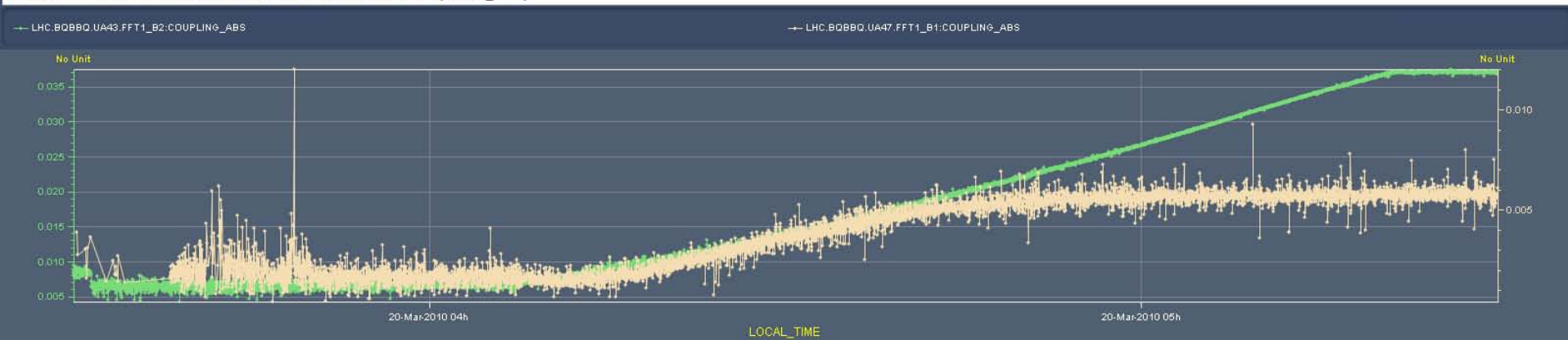
→ RPTE_UA23_RB_A12_I_MEAS



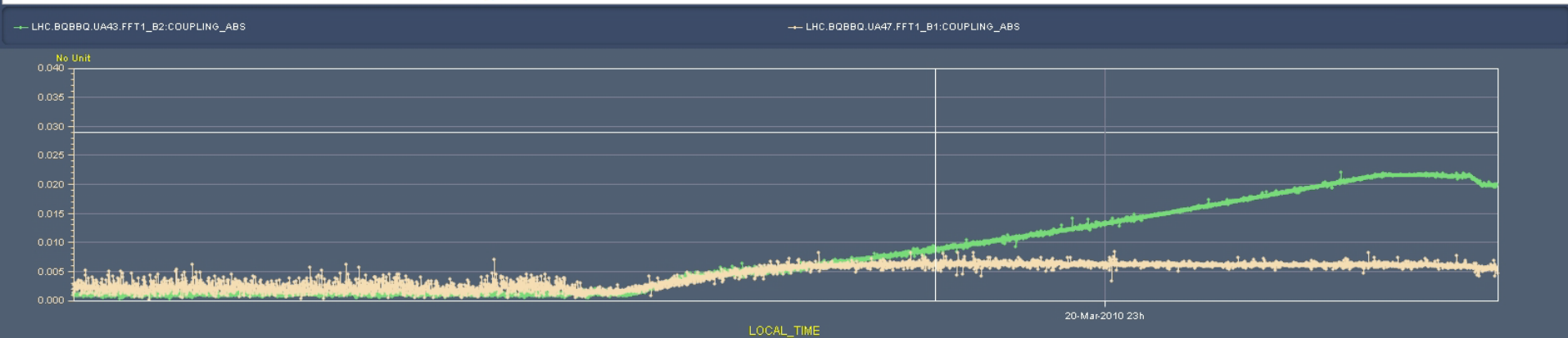
Saturday 20/3/2010

- Reduction of the coupling by a factor 2 at the end of the ramp. Not enough time to correct it. Still some work to do...

Timeseries Chart between 2010-03-20 03:30:00 and 2010-03-20 05:30:00 (LOCAL_TIME)

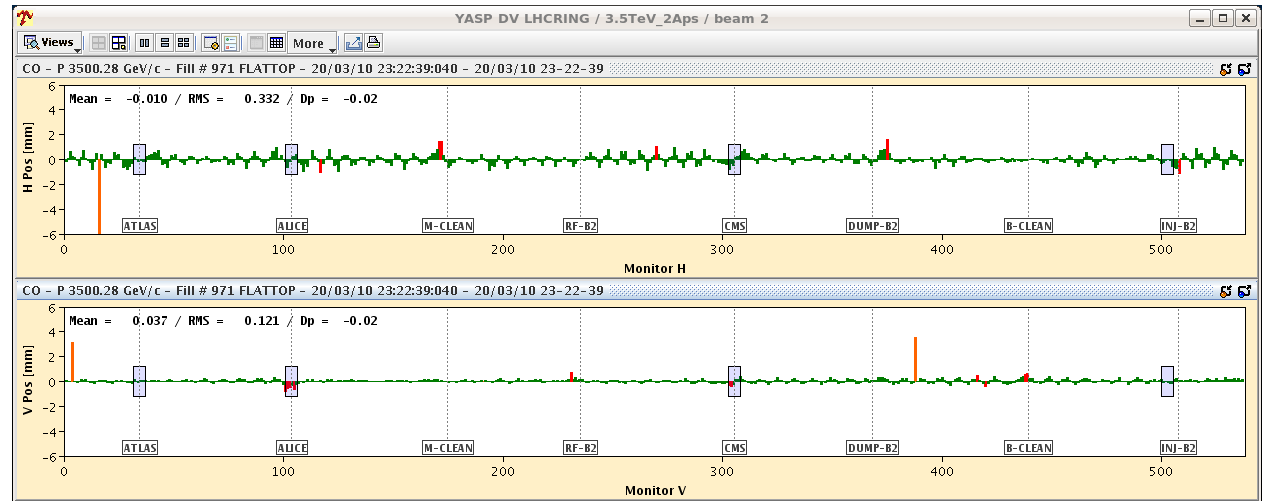
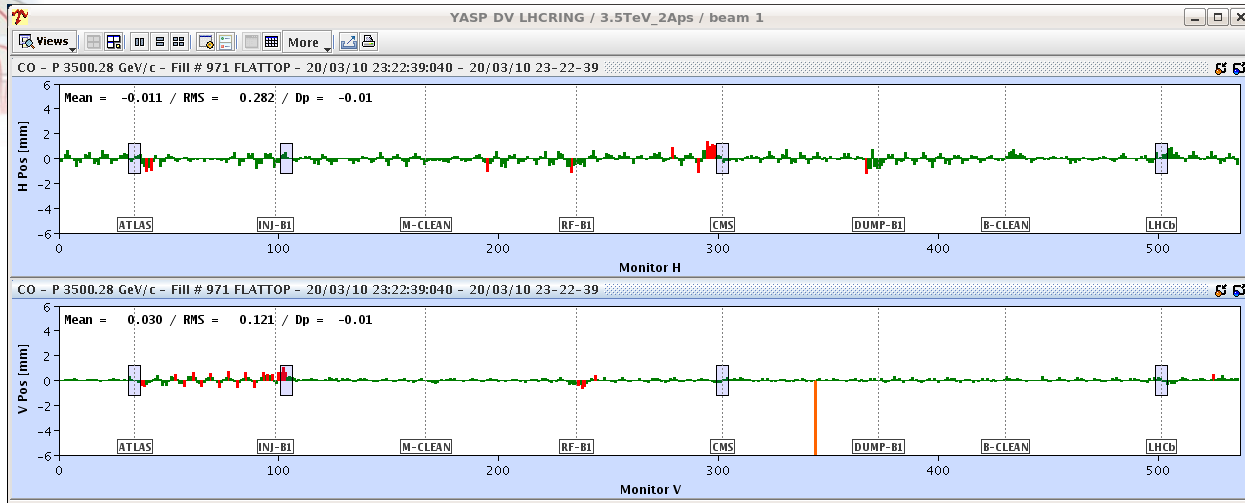


Timeseries Chart between 2010-03-20 22:00:00 and 2010-03-20 23:59:00 (LOCAL_TIME)



Saturday 20/3/2010

• Orbit correction



Saturday 20/3/2010

- Trip of the trim quadrupoles due to a large dl/dt requested by the tune feedback ~7 mins after the end of the ramp → to be followed-up. Intercepted by the PIC, first channel to trigger. No BLM above threshold.

The screenshot displays the BIC/EVENT_SEQ software interface, which is divided into several sections:

- HEADER:** System: BIC, Class: EVENT_SEQ, Source: ISA, Event stamp: 23:22:49.122 20/03/10, Version: 0.3.23, Encoding: BIC/EVENT_SEQ, Qualifier: [NORMAL], Analysis flags: [NORMAL].
- SUMMARY:** pmAnalysisModuleVersion: 0.3.23, Analysis result description: First input change detected: USER_PERMIT: Ch 12(PIC_MSK): A T -> F on CIB.UA67.R6.B2, Triggered BIC inputs: Ch 12(PIC_MSK), Ch 3(LBDS-b1), Ch 3(LBDS-b2), Beam 1 propagation delay to LBDS: 4000 ns, Beam 2 propagation delay to LBDS: 5000 ns, OVERALL: 38 BICs triggered valid PM data.
- EVENT OVERVIEW:** A table listing events with columns for Index, Loc. Permit A/B, Time, Delta(uSec), Description, and BIC name. The events range from index 197 to 1721, showing various USER_PERMIT triggers from different BICs.
- SOURCE OVERVIEW:** A table listing sources with columns for Index, Source Name, and Data Valid. Sources range from index 1 to 32, including CIB.UJ56.R5.B1, CIB.UA83.L8.B2, CIB.UA67.R6.B1, CIB.UA83.L8.B1, CIB.US15.L1.B1, CIB.US15.L1.B2, CIB.SR7.S7.B1, CIB.SR7.S7.B2, CIB.USC55.L5..., CIB.UA83.L8.B1, CIB.UA87.R8..., CIB.UA87.R8.B1, CIB.UA83.L8.B1, CIB.US15.R1.B1, CIB.US15.R1.B2, CIB.UJ33.U3.B2, CIB.UJ33.U3.B1, CIB.US15.R1.B1, CIB.UA63.L6.B2, CIB.UA63.L6.B1, CIB.UA63.L6.B1, CIB.UA87.R8.B1, CIB.UA87.R8.B1, CIB.UA87.R8.B1, CIB.UA63.L6.B1, CIB.UA63.L6.B1, CIB.UA67.R6.B2, CIB.UA67.R6.B2, CIB.SR8.INJ2.1, CIB.SR3.S3.B1, CIB.SR3.S3.B1, CIB.SR2.INJ1.1, CIB.UA67.R6..., CIB.SR2.INJ1.2, CIB.UA67.R6..., CIB.CCR.LHC.B1, CIB.UA47.R4..., CIB.UA23.L2.B2, CIB.UA47.R4..., CIB.CCR.LHC.B2, CIB.UA23.L2.B1, CIB.UA43.I4.B2.
- FILTER:** A set of checkboxes for filtering events: Beam_Permit_Loop, Beam_Permit, Local_Permit, User_Permit (checked), User_Permit_Glitch, Software, Mask, Masked_Permit, Disabled_Permit, Channel_Enable, Test, Power, Self_Test, Time, Safe_Beam_Flag, Marker, Injection BICs.



Sunday 21/3/2010

- 03:00 - 3:40 : Another ramp at 3.5 TeV performed
 - Beam dump immediately at the end of the ramp
 - RQTF12, RQTF23 and RQTF34 tripped
 - 06:10 - 07:00 : Another ramp at 3.5 TeV
 - Tune feedback stopped on B2 at 2 TeV, left ON for B1
 - And finally stopped for B1 at 3.5 TeV
 - Performed orbit correction - first pass - rms < 0.2 mm
 - Coupling B2 reduced
 - Started to put back the tunes of B2 onto nominal
 - 08:00 : Lost cryo (temperature sensor) and tripped triplet L5
-



Sunday 21/3/2010

- Re-establish 450 GeV
 - Feed-forward tune feedback trims
 - Re-establish 450 GeV beta beat corrections and level of beta beat
 - Ramp to 3.5 TeV - check beam parameters and correct - including beta beat
 - Protection device and collimator setting-up at 3.5 TeV
-
- Night shift: Damper setting up at 450 GeV
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