

29/04/2010

- 9:00 - 10:45 : access in P4 for EPC investigation on RQTD.A45B1. Power convertor which was accidentally limited to 120 A.

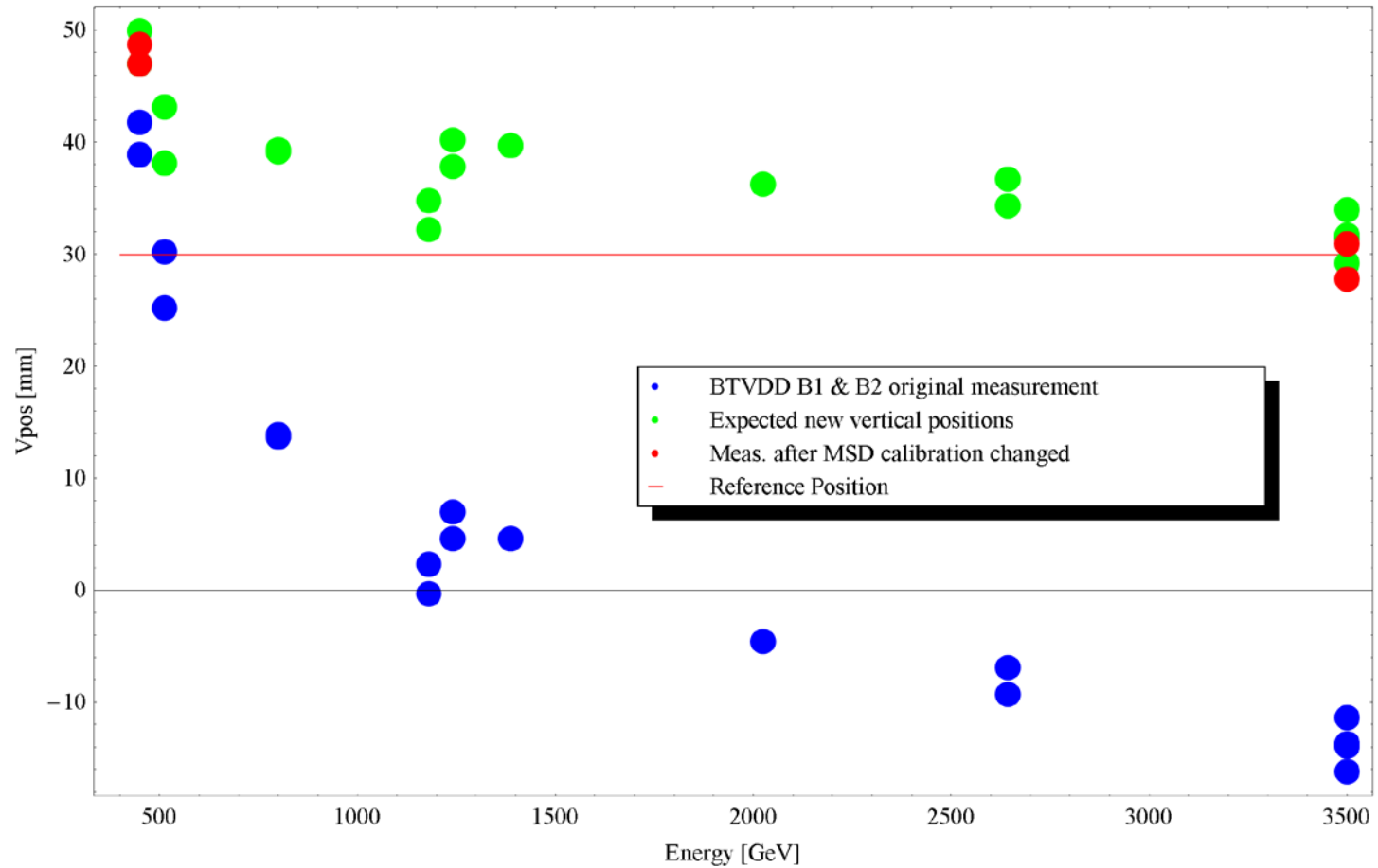
In parallel:

- BLM configuration for higher intensity tests (B. Holzer)
- Issues with proxy servers for BCT (P. Charrue)
- IQC thresholds adjusted after HW fixes to MKI during the TS (B. Goddard)
- Updated and restarted tune-feedback-controller (R. Steinhagen)

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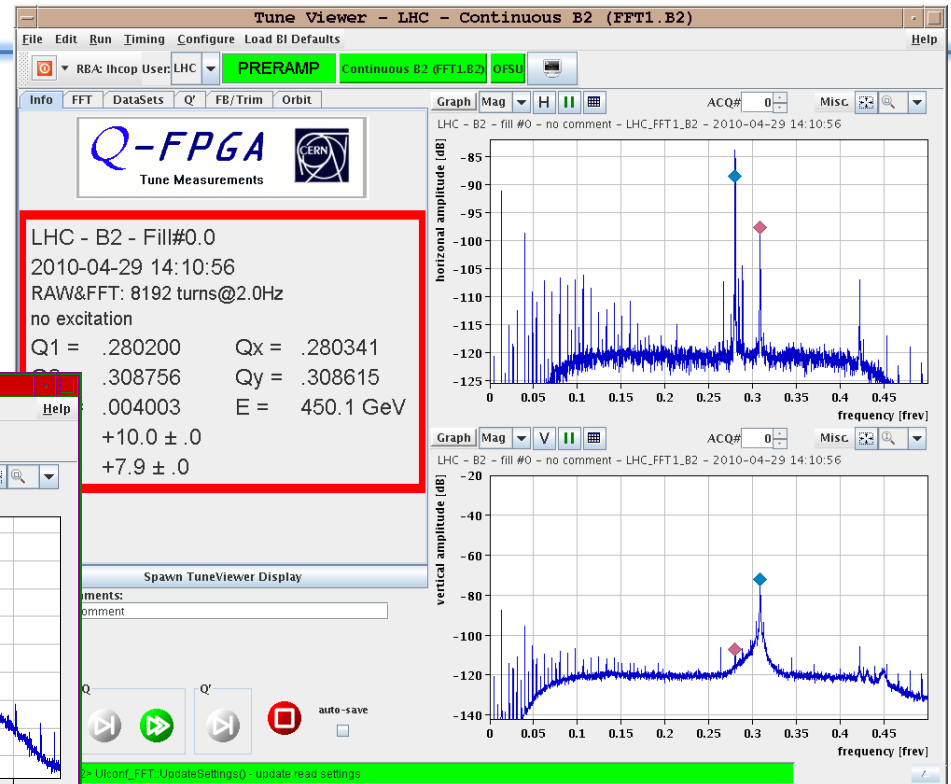
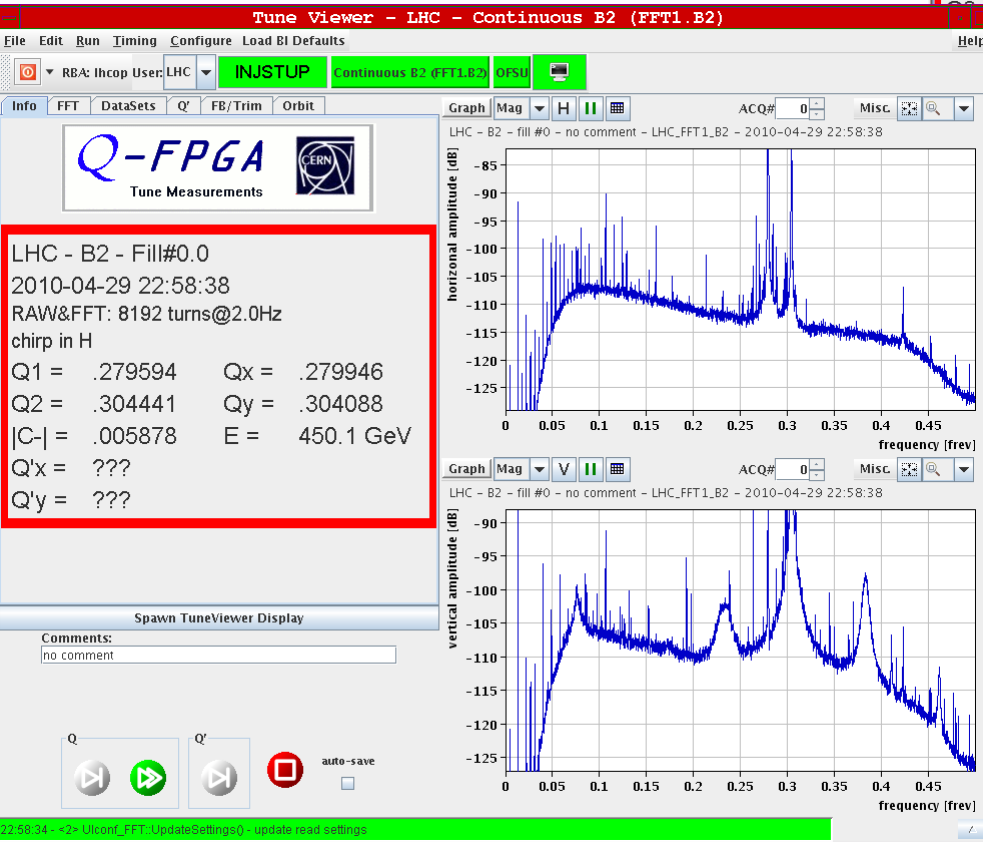
- 12:25 : Ready to inject beams again in the LHC
- Setting-up for circulating beam
- Dump beams 450 GeV for data analysis (Jan Uythoven → done and O.K)
- 14:00 : Injecting beam 1 and beam 2, $1e10$ /bunch, for ramp
- 14:15-15:00 : Ramp
- Dump beam 2 while moving the collimators at 3.5 TeV before the squeeze. Difference setting/measured position of about 0.5 mm in TCSG.B5L7.B2. Probably result of the power-cut occurred Wed. at 06:30.
- Tests of the tune feedback: more robust set-up after the modifications (can stand a reset) but still issues when applying large trims → Trip of RQTF/RQTD during one of the tests → Dumped beam 1.
- Dump beam 1, 3.5TeV all data analysis done : O.K. (Jan Uythoven)

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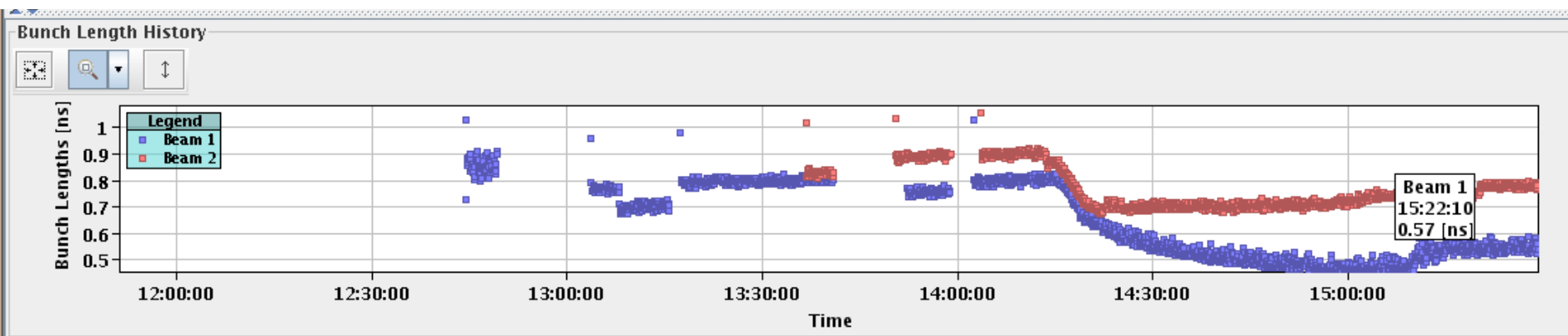
hump still visible even with ATLAS solenoid and toroid OFF



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- Re-calibration of the bunch length monitor: important to understand tune shift measurements and determine the machine impedance

- B1: bunch lengths decrease to the expected value of ~ 0.5 ns (to be checked offline and vs experiments in detail). 15:05, Phase loop opened in SR4, dipole oscillations observed and bunch length increase of about 100 ps.
- B2: phase loop opened halfway through the ramp (at about 14:20) and clear emittance blow up.
- Likely over-estimation of the bunch length by $\sim 30\%$ so far (to be checked in detail and cross-calibrated with experiments).



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- 16:33 - Ramping down
- Warning on collimator TCDIH.29050 concerning the left downstream revolver: piquet had to reset the resolver
- 18:45 : Starting the injection and protection device systems studies for high intensity
- Got further delayed in the studies:
 - Setting-up of LHCPROBE and LHCINDIV
 - 21:45: RB S78 tripped → power converter problem. Already occurred in the night → EPC to understand and fix the problem
 - 00:33: RB S78 tripped again → still power converter problem. New reset done
 - UPS problem in RE12 → UPS recharging → no need for access for the time being
 - XPOC failed B2 - Access - changed card.
- Injection setting-up for high intensity only started to be continued



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04:30 - 05:15 - Preparation for Abort Gap cleaning studies:

- Restore the beam parameters, with chromaticity at +3,+3
 - Got multiple trips of RQTD.A81.B2 - reset performed but tripped again - water cooling problem - preparing for access - end of AG cleaning studies. No trial performed.
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30	FR	08:00	7	Cycling and bringing CMS up - loss map: qualification of the collimation system after technical stop
30	FR	15:00	8	Injection and protection device setting up for high intensity (cont'd)
30	FR	23:00	9	Aperture measurements, 450 GeV, pilot
1	SA	08:00	8	450 GeV high intensity "test runs" - 2x2 - I_bunch = 4e10 - 8e10 - 1e11 - Bringing ATLAS up
1	SA	16:00	7	450 GeV high intensity "test runs" - 2x2 - I_bunch = 4e10 - 8e10 - 1e11
1	SA	23:00	8	Beta beat measurements in the ramp
2	SU	M	8	IR6 aperture measurements
2	SU	A	8	450 GeV high intensity "test runs" - 2x2 - I_bunch = 4e10 - 8e10 - 1e11
2	SU	N	8	450 GeV high intensity physics - 2x2 - I_bunch >7e10 - STABLE BEAMS with max achieved Intensity