

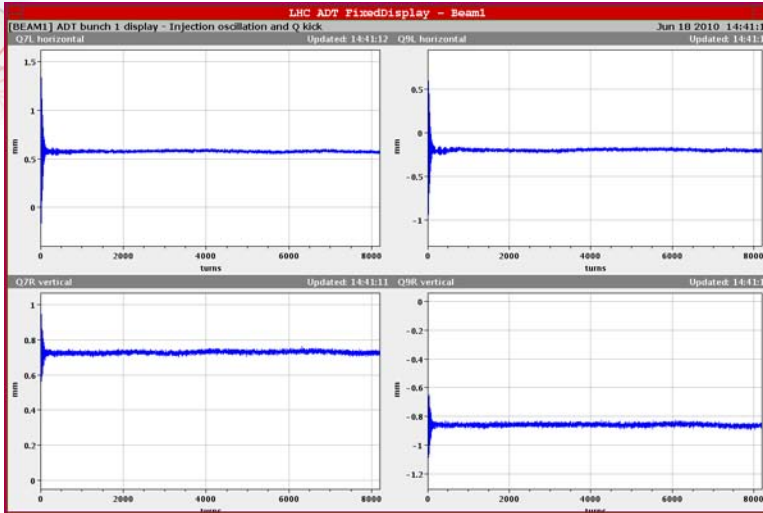


Friday 18 June

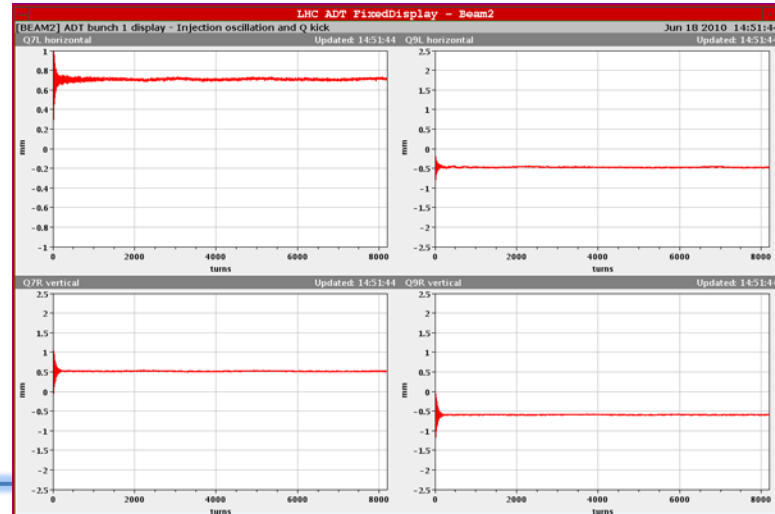
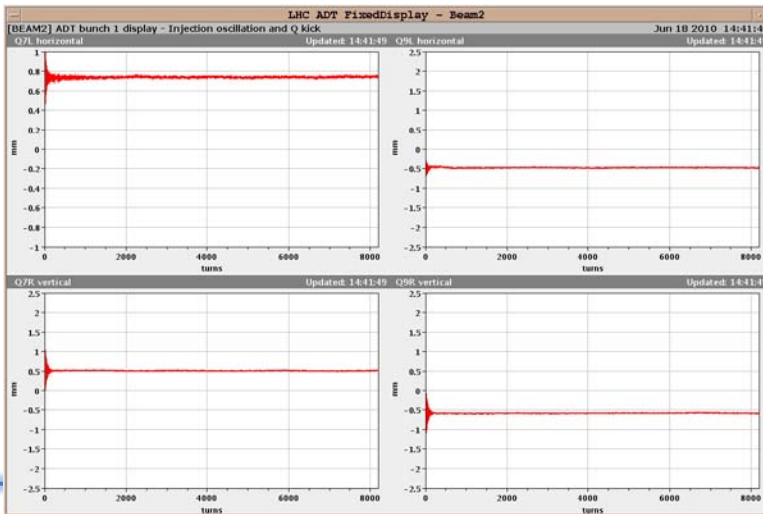
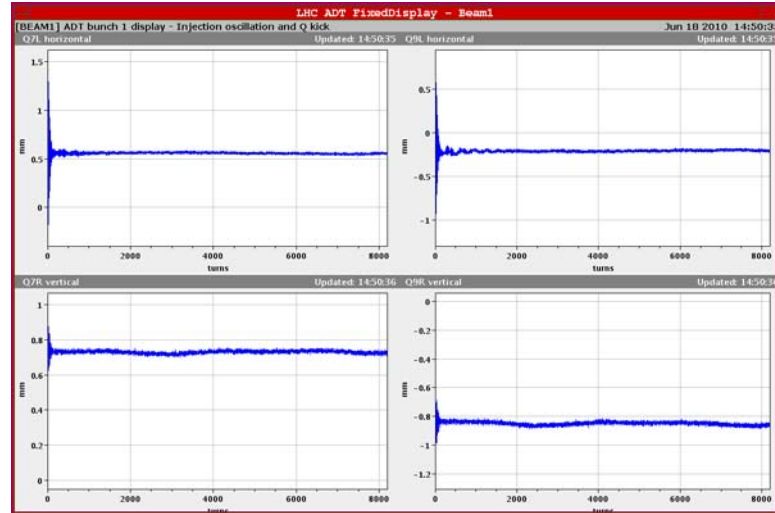
- During the meeting ready with beam at 3.5 TeV and preparing for squeeze → trip of RB.A78 power converter (the reason is not understood)
 - Pre-cycle
 - Collimation sequence (R. Assmann, R. Bruce) tested. Loading of position interlock thresholds does not work for beam process generated last night (energy-dependent gap thresholds OK) → Being followed-up
 - TDCQ ramp needs to be generated and reloaded
 - 13:30 injected again.
 - Verification of the operation of the transverse feedback with 2 nominal bunches → OK → Operation with multi-bunches with large spacing should be OK
 - No emittance increase observed after the second injection
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Friday 18 June

1st injection



2nd injection



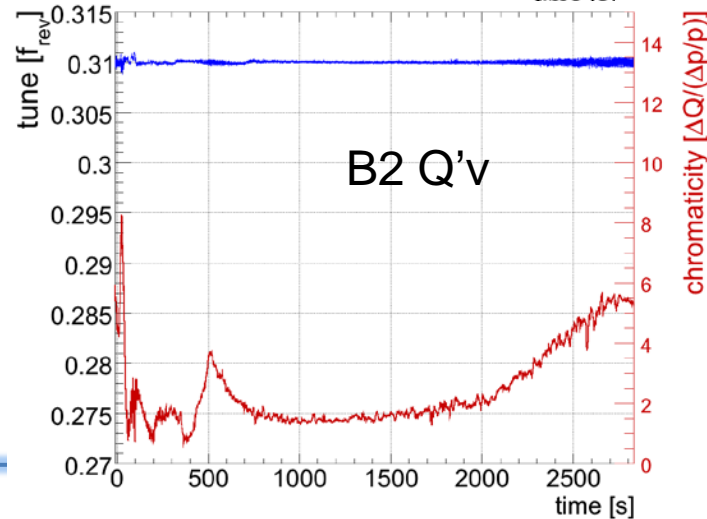
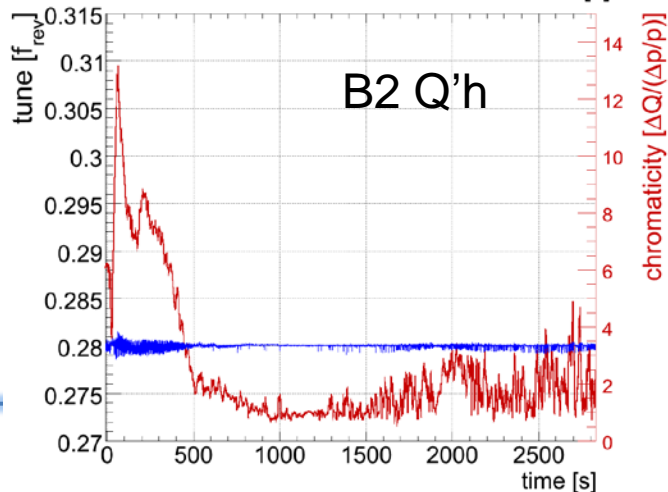
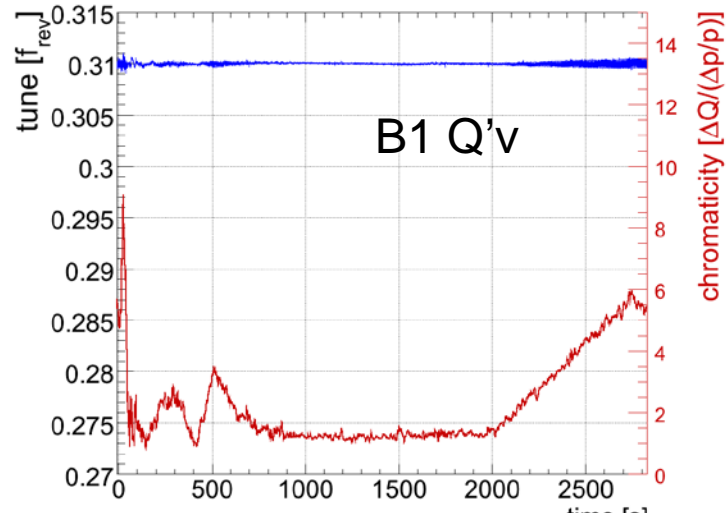
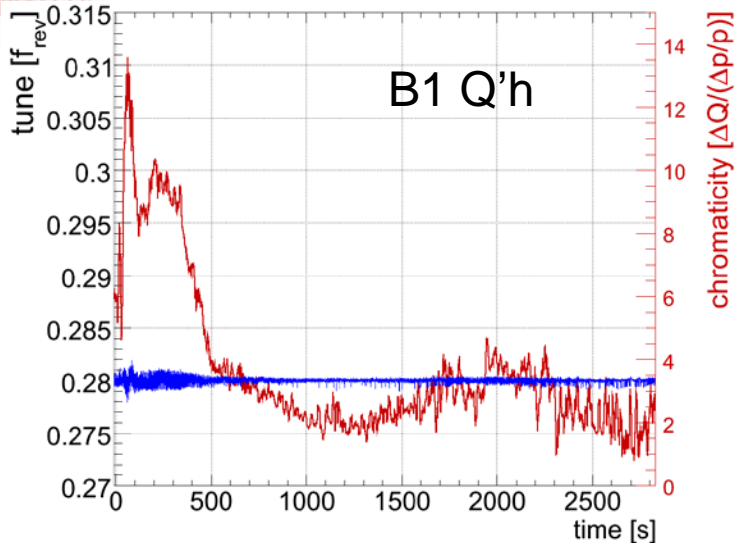


Friday 18 to Saturday 19 June

- 18:00: squeezed at 7 m preparing for squeeze at 3.5 m. Trip of RB.A78. Again... → Access
 - 20:00 problem on temperature reading on current lead of RQTL7.L7
 - 21:00 Power converter problem fixed. No expert available for replacement of temperature measurement card. Found mode of operation to run through the WE.
 - In the shadow of the LHC access but still continuing until ~23:00 : no beam due to Linac RF problems
 - Linac RF recovered but then still no beam, this time from PS, due to injection septum problem until 2 am.
 - Re-establishing the beams with pilot.
 - Both beams dumped on over-injection (BLMs at pt 2)
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Friday 18 to Saturday 19 June

3:30 - 4:20: Measured chromaticity through the ramp. Data already analysed by Ralph Steinhagen. Will be feed forward (3rd iteration)



The last Q' corrections were effective and there are only some large Q' transients during the first 100 seconds (snapback). The rest is fairly stable.



Friday 18 to Saturday 19 June

- 5:00 : Started measurements of beta beat at 3.5 TeV, with stops at 9m, 7m, and finally at 3.5 m
 - Presently ongoing. First indications that beta beat similar to that observed for 2 m (to be analyzed in detail)
 - At the end of the beta beat measurements (~9:00), check the “mechanics” of collapse the separation bumps (one by one), introduce crossing angle in IP1 and 5, $-100 \mu\text{rad}$ (in steps)
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• Move on to TCT setting up at 3.5 TeV, 3.5m, with collapsed separation bumps all IPs and crossing angle in IP1/5

We plan to use 2bx2b, (single_2b_1_1_1)

19	Sat	01:00	8	SET BLM threshold to operational settings. Chromaticity and optics verification with low intensity - Beta beat measurements from injection to end of squeeze : Inject 1e10 (no LHC long. blow-up)+ ramp and perform chromaticity measurements + squeeze with stops at 9, 7, 5 and 3.5 m + collapse all separation bumps + switch on crossing angle in IP1/IP5, both at minus 100 urad (knob values)
19	Sat	09:00	2	Ramp down combo - SET BLM threshold to collimator set-up settings (B. Dehning)
19	Sat	11:00	8	Inject 2bx2b (single_2b_1_1_1), no longitudinal blow-up, 1e11, ramp + squeeze to 3.5 m, collapse separation in all IPs , put crossing angle in IP1/5 (-100urad) - Vernier scan in al IPs - TCTs setting-up - TCDQ setting-up - QUALIFICATION (WARN ALL EXPERIMENTS FIRST): asynch dump simulation with RF off after scraping beam down to 2.5×10^{10} on third integer
19	Sat	19:00	2	Ramp down combo
19	Sat	21:00	8	Inject 2bx2b (single_2b_1_1_1), with longitudinal blow-up in the LHC ramp-squeeze-collapse separation in all IPs (crossing angle ON at -100urad in IP1/5). QUALIFICATION (WARN ALL EXPERIMENTS FIRST): asynch dump simulation with RF off after scraping beam down to 2.5×10^{10} on third integer - NEED RF experts for the longitudinal blow-up
20	Sun	05:00	2	Ramp down combo
20	Sun	07:00	8	450 GeV LBDS qualification
20	Sun	15:00	6	Inject 2bx2b (single_2b_1_1_1), with longitudinal blow-up in the LHC ramp-squeeze-collapse separation in all IPs (crossing angle ON at -100urad in IP1/5) - beam observation time. QUALIFICATION (WARN ALL EXPERIMENTS FIRST): asynch dump simulation with RF off after scraping beam down to 2.5×10^{10} on third integer
20	Sun	21:00	2	Ramp down combo - SET BLM threshold to operational settings.
20	Sun	23:00	10	Inject 2bx2b (single_2b_1_1_1), with longitudinal blow-up in the LHC ramp-squeeze-collapse separation in 1/5/2/8 (crossing angle in IP1/5) – Tuning of the working point



Saturday 19 June

Issues:

- At 3.5 TeV, lost the QPS-OK on RB.A67 because of a quench heater discharging - came back by itself
 - Water pump in point 7 (sump)
 - Sector 81: QPS noisy card (B21R8) → threshold increased. To be replaced in case of access.
 - MKI8: timing instability of the injection kicker pulse
 - QTL7.L7 current lead temperature measurement and control
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